



JOURNAL OF THE ITALIAN ARMY FOUNDED IN 1856

RIVISTA MILITARE

1

JANUARY
FEBRUARY
MARCH
APRIL
2000

Lire 4.000

Euro 2,06

Spedizione in
abbonamento postale
comma 34 art. 2
L. 549/95 Roma



EUROPEAN SECURITY



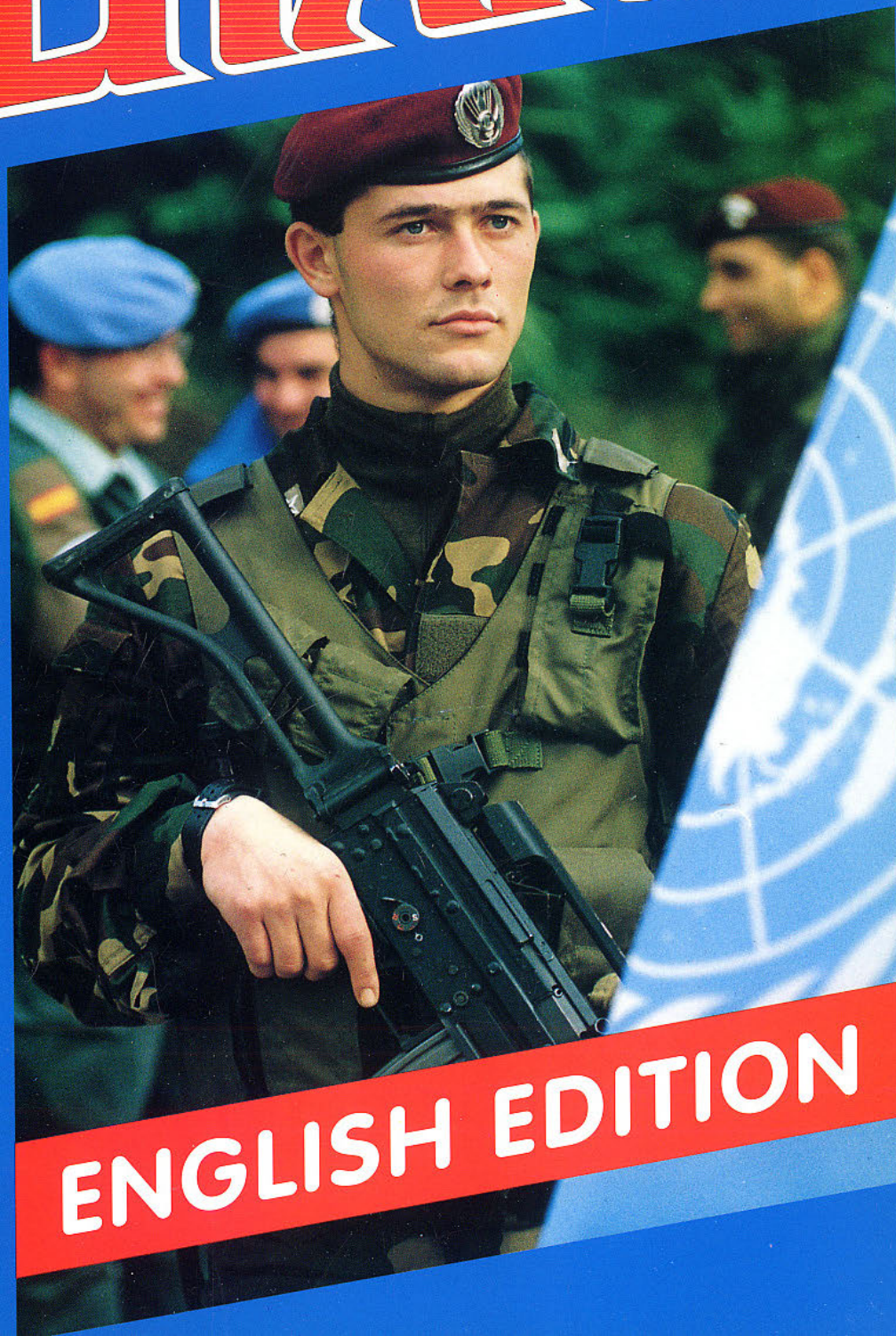
THE ARMY OF 2000



AN ARMY FOR EUROPE



ON THE OIL ROUTES



ENGLISH EDITION



Rivista Militare
is on INTERNET

Official site

www.esercito.difesa.it



CONTENTS



Number One 2000

January - February

March - April

Rivista Militare aims at broadening and updating the technical and vocational training of Officers and NCOs. It is thus a means of propagating the military way of thinking and a forum of study and debate. Through the publication of articles of technical and scientific interest, Rivista Militare also aims at informing the general public on the Army and on military issues.

Politics, Economics and Strategy

- 2 **The Italian Armed Forces' Contribution to the Security Process in the Construction of European Unity**
(*Francesco Cervoni*)

- 10 **The Army of 2000. The Current Situation**
(*Roberto Speciale*)

- 22 **An Army for Europe**
(*Claudio Graziano*)

- 38 **The Balkans. Italy in the Frontline**
(*Pier Paolo Lunelli*)

- 54 **Nuclear Armaments. Concepts and Prejudice**
(*Maurizio Coccia*)

- 62 **Romania. The New Army. Interview with the Army Chief of Staff**
(*Enrico Magnani*)

- 68 **East Timor. The Italians in the Ghost Island**
(*Salvatore Capochiani*)

- 76 **On the Oil Routes**
(*Ornella Rota*)

Science, Technology and Training

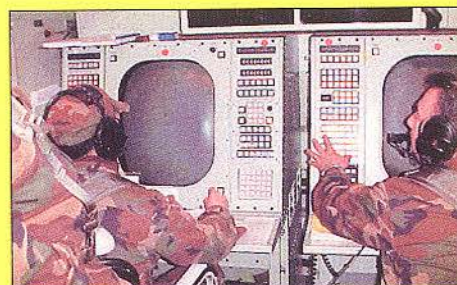
- 82 **"Integrated Logistics" for the Management of Army Materials**
(*Francesco Zinno*)

History

- 92 **Roman Emperors. Tiberius**
(*Carminio Fiore*)

- 102 **Roman Emperors. Titus Flavius Vespasian**
(*Carminio Fiore*)

- 110 **Sommaire - Inhalt - Resumen**



The Army's out-of-area engagements are more and more frequent, as shown also by the recent mission in East Timor.

OUR-MONTHLY

Supplement to numbers 1 and 2
Rivista Militare Italian Edition

Editor in Chief:
Giovanni CERBO

Management and Editorial Office

Via di S. Marco

186 Rome

Phone 0039 0647357373

Advertising

Director of the Secretariat

Rivista Militare

Phone 0039 066795027

Internet

Printed in Rome by

SECA TIPOLITOGRAFIA
ROMA - Tel. 06/540030 - Fax 06/527376
NEPI - Zona Ind. Settevene - Tel. 0781/527323

Photoprocessing

Radio Lodoli

Phone 0039 065898780

Subscription and forwarding

mail

Law 662/96, art. 2, para 20/c

Conditions for 2000:

Subscription number: Lit. 4,000 - Euro 2,06

Subscription back number: Lit. 8,000 - Euro 4,12

Subscription rates

Subscription by: Lire 22,000 a year

Subscription abroad: Lire 30,000 a year

Payment must be made on postal

Account No. 22521009 - SME

Centro pubblicitaria dell'Esercito

3/A, Via XX Settembre - Rome

Residents abroad may remit

Payment through bank cheque or

International postal order

Authorized by the Court of Rome

Order No. 944 of the Registry by

Decree 7-6-1949

2000

© Copyright by
Rivista Militare



ASSOCIATED TO USPI
UNIONE STAMPA
PERIODICA ITALIANA

The production of this magazine
has been supervised
by Omero Rampa

Instructions for Contributors: Anyone may contribute. To guarantee the highest objectivity of information, Rivista Militare leaves contributors ample freedom, though it does not necessarily share their opinions. The Author is thus solely responsible for the articles which, published unedited and without editorial ties, exclusively reflect his personal ideas. Articles must be original in thought and should not exceed ten typewritten pages. Once the Author receives his fee, he loses all exclusive rights. Rivista Militare may then pass the article on to other publications and EMPA (European Military Press Association) periodicals. Articles should be accompanied by suitable photographs, illustrations, explanatory tables, together with a photograph of the Author, a brief «curriculum vitae» and a ten-line typewritten summary. Rivista Militare reserves the right to change the title of articles and choose the typeface deemed most suitable. Rivista Militare is equipped with a computerized system for phototypesetting and videopaging. In order to make the production of the articles more expeditious, it is desirable that the Authors provide, besides the text on paper, also the diskette with the text files of the article. Any system and type of computer can be used.



THE ITALIAN ARMED FORCES' CONTRIBUTION TO THE SECURITY PROCESS IN THE CONSTRUCTION OF EUROPEAN UNITY

**Presentation by the Chief of Staff of the Army at the "S.Pio V" University
(Rome, October 12, 1999)**

My present considerations stem from the growing feeling that the European Community needs a common security and defence organization, which, at political level, was defined as Common Foreign and Security Policy (PESC) and, at technological level, as European Security and Defence Identity.

In this connection, I wish to outline the steps taken so far in Europe in order to build a regional collective security and defence system.

The treaties signed in Rome on May 25, 1957 sanctioned the birth of the European Economic Community and the European Community for Atomic Energy, as the first official act for achieving European unity and integration. Its main supporters were three great European statesmen: Konrad Adenauer, Alcide De Gasperi and Robert Schuman.

Robert Schuman, inspired by Jean Monnet, some years before had given a strong impulse to the Treaty of Paris, signed by Belgium, France, Germany, Italy, Luxembourg and the Netherlands, establishing the European Community for Coal and Steel, aimed at boosting a productive sector which was then strategically important for the reconstruction of Europe, which had come out exhausted from WWII.

Together with this process of economic integration, and needing to ensure a common continental defence against the increasing threat of Soviet expansionism - after the unsuccessful attempt to establish a European Defence Community (CED) with a common military instrument (owing to France's opposition), the WEU was created in

Paris in 1954, with the admission of Italy and the Federal Republic of Germany to the pre-existing Western Union organization, which had been established by France, Britain, Belgium, the Netherlands and Luxembourg with the Treaty of Brussels in 1948.

The political reason of this transformation was the necessity of ensuring Germany's important contribution to the common defence of Western Europe, after the project of a European Defence Community was abandoned, permitting, at the same time, the control of the German rearmament.

Nevertheless, the increase of the Soviet pressure on the international scene, together with the indispensable American presence in Europe, strengthened the bonds of mutual assistance established by NATO even more, but in practice deprived the WEU of the substance inherited from the European Defence Community. The prevailing principle was not to subtract precious resources from the Atlantic Alliance by assigning them to dubiously useful "duplicates".

Therefore, the WEU remained, for almost thirty years, "a box politically and militarily empty" and earned the nickname of "sleeping beauty". It had a minimal number of management structures, scattered between London and Paris, with no functional and operational connection with NATO, and the only and rather paradoxical job of controlling the rearmament of its members.

Only after the European single Act of February 1986 it was possible to see an endeavour to reactivate the cooperation process in the field of security, as "an essential contribution for the development of a European political identity". Along the same line was also the WEU Council of 1987, which confirmed more clearly the intention to develop a distinct "European defence pillar" and to devise a continental political and strategic thought.

A series of rapid and successive "technical" decisions brought the WEU Secretariat from London to Brussels (January 1993), in order to have a geographic correspondence with the home of the Alliance; the Secretariat was strengthened with the constitution of a "Planning Cell" and the addition, last year, of a "Situation Centre", giving birth to a multinational Military Staff headed by a three-star General or Admiral.

Finally, the probably most significant measure: opening the WEU of the 10 full-fledged members to new categories of members: "observers", "associate" and "associated partners", reaching the number of no less than 28 Countries.

The relaunch, therefore, has occurred at the end of the bipolar confrontation, when it was evident that there was a complete change in the evaluation of the specific political weight of each nation within the international community.

The first concrete step on the operational plane were the "autonomous" naval operations of control and security in the Strait of Hormuz (1987-88) and in the Persian Gulf (1990-91) i.e. in those "out of area" geographical zones where NATO's ability, or rather will, to intervene was still uncertain and discussed.

Later, the new international situation and the reunification of Germany led to intense

negotiations which resulted in the Maastricht Treaty (November 1, 1993) from which WEU emerged as an organization qualified for the common defence of Europe, connected with NATO, but independent of it. Finally, the Petersberg Declaration (June 1992), the Kirchberg Declaration (May 1994) and the Noordwijk Document (November 1994) were the basis for its conceptual and operational development.

Furthermore, the gradual definition of a policy of common defence is included in the Common Foreign and Security Policy of the Amsterdam Treaty (October 2, 1997), and the European Council can now autonomously decide the adoption of a common defence policy; in short, WEU has achieved the operational capability of defence, i.e. humanitarian missions and PSOs, envisaged by the Petersberg Declaration.

From the legal point of view, Amsterdam has therefore encouraged the mutual collaboration and cooperation of EU and WEU.

Here I conclude my short historical excursus. But, what is now the situation of the European integration in the defence sector? And what its possible future evolution?

Everyone will agree, I'm sure, that when we talk about WEU the focal point of the problem is the relationship between this organization and NATO, and the consequent "dualism" which characterizes the European organization, "suspended", so to speak, between the Atlantic loyalty and the need for a better "characterization" as regards the aspects of regional security.

While the Maastricht and Amsterdam Treaties establish a bond between WEU and EU, the connection between Western Europe and NATO is ensured by the definition of WEU as the "European pillar" of the Alliance.

In fact, the NATO Summit in Washington (April 1999) officially sanctioned the adoption of the European Security and Defence Identity within the policy of the Alliance. Furthermore, it confirmed that WEU, among the various institutions with which NATO collaborates, has the specific character of interlocutor on matters concerning European defence. Incidentally, we note that, if the integration of WEU in the EU takes place, the agreements and procedures developed for the cooperation between Nato and WEU will have to be adapted and transferred to the EU.

It must be emphasized that in the clauses of the Washington Summit's Final Communiqué both the American and the European side find points to their advantage.

For the Americans it was important to maintain the European commitment to act - as literally reported in the communiqué - "when the Alliance as a whole is not militarily engaged". In substance, all the Europeans (France included) agree: it only remains to see how this concept can be developed and defined, in order to avoid giving the European defence an auxiliary and almost ancillary significance.

Furthermore, the U.S. deemed the declaration of a European commitment essential for the definition of the future NATO-EU relationship, considering the prospected end of the WEU "trait d'union", and also believed appropriate to stress the need to avoid "unnecessary duplications" with NATO. This implied that some duplications within the EU structures would be inevitable, but all the EU partners agreed on limiting them to the strictly necessary, practically to the dimensions of the present WEU resources.

Finally, they considered important to have a pledge that Turkey and the other non-

EU Allies would be involved, and this was obtained in very clear and strong terms.

The European Union, besides the fundamental point of the mentioned political recognition, aims at ensuring the access to the resources of NATO. The communiqué tackles the problem with the expressions "ready access", "assured access" (to the NATO capabilities of operational planning), "presumption of availability" (for the remaining resources). This is a still cautious terminology, within a NATO-EU collaboration context which has to be built almost entirely. But the communiqué outlines with precision the work that has to be done, in a very concrete and constructive tone.

In the light of the last developments, if the European operational arm assumed its real concreteness within the Alliance and, through the concept of "separable" capabilities, was placed at the EU's disposal, it would be possible to find a way to a future European integration without renouncing the Atlantic bonds.

On the other hand, clearly today the US is not willing to provide the automatic guarantee of common defence to members of the EU not included in NATO (Austria, Finland, Ireland, Sweden).

It is precisely within this framework that the different problems of coordination can be solved: through WEU which, taking upon itself the function of liaison between the Alliance and the EU, intends to facilitate - and certainly not hamper - the Union's process of political integration.

It is also necessary to note that this liaison is indispensable from the institutional viewpoint. In fact, all WEU nations are members of the Alliance, while some of the EU countries are not. These are "necessarily" neutral countries, or countries marked by very deep traditions of neutrality, and their evolution in that direction is very unlikely, at least in the short/medium term.

Moreover, we should not forget that the WEU members are bound by the Modified Treaty of Brussels of 1954, which guarantees their mutual defence through the Atlantic Alliance.

Nevertheless, it should be stressed that within the European countries there is a growing acceptance of the concept of a "United but differentiated" European Union, capable of giving room, in specific areas and for certain nations, to forms of "strengthened solidarity and cooperation".

In this regard, it should also be considered that the Partnership for Peace (PFP), in its present form, as issued from the Madrid Summit of July 1997, has now overcome its initial "ecumenical" phase and is now resolutely entering a phase of intense operational and training activities.

Therefore the Madrid Conference, with its 44 participating Nations, can be considered an extremely important historical moment: the laying of the foundations of the 21st Century's continental architecture.

The Alliance, in fact, opened its doors to Poland, Hungary and the Czech Republic,

while Slovenia and Rumania will join shortly.

No democratic country of Europe, whose adhesion is in line with the objectives of the treaty, will be excluded. Also the essential characteristics of the Alliance's internal reform process have been decisive elements.

Anyway, the adhesion to NATO of new members will not be a threat to Russia; on the contrary, it will result in a stable Central and Eastern Europe.

The close and fruitful cooperation carried out in the Balkans during the last five years, from Bosnia to Kosovo, is a model capable of sending a message of hope to the entire Europe.

As a matter of fact, it is crucially important that security in Europe be achieved only together with Russia, and not by isolating that Country. Therefore, on the East there is no more an enemy, but rather a partner, equally responsible for a European security architecture.

Considering the different positions taken by the various countries regarding these aspects, it seems expedient to adopt a more realistic approach which would somehow permit to achieve the result of strengthening the European security and defence dimensions, even if this could appear far from the more ambitious supernational objectives.

Taking for granted that the institutional adaptations can follow in due time, at present the priority must be given to the dual function of WEU, as defence component of the EU and European pillar of NATO.

In order to meet this requirement, each WEU Nation has been invited to put at the organization's disposal its contributions in land, naval and air forces, and to appoint national Commanders capable of carrying out, in a multinational environment, functions of Operation Command and Force Command in Peace Support Operations.

A step in this direction is the strong impulse given by the recently constituted WEU Military Staff in improving the exchange of information on the size and type of Commands, forces and resources earmarked by the individual nations for the European Multinational Forces (FAWEU- Forces Answerable to WEU).

In this regard, it should be noted that WEU has neither assigned forces nor a permanent command at its disposal.

FAWEUs - i.e. commands and units that could be put at WEU's disposal on a case-by-case basis for specific operations - are kept up-to-date in a data-base managed by the "WEU Planning Cell". At the present time it includes, besides a certain number of national land, naval and air units, several multinational formations such as the EUROCORPS, the Centre Multinational Division, EUROFOR etc...

In this specific sector, Italy has expressed its willingness to contribute to the development of WEU humanitarian operations, on a case-by-case basis, with predesignated modular formations based on land, naval and air assets.

This is due to the fact that Italy, in line with its long-standing policy in the sector of

international cooperation - aimed at strengthening the European Security and Defence Identity - favours the aggregation of multinational structures and forces within the European sphere.

It is in this perspective, therefore, that the creation of a ready-intervention land force, such as EUROFOR, acquires a specific interest for the Army.

Eurofor is the result of an Italian politico-military initiative, launched at the end of 1993, and was constituted by the three Countries concerned (Italy, France and Spain) which were joined by Portugal at a later time.

EUROFOR is a mixed-composition, four-partner land Major Unit, also open to the contribution of other nations.

The Italian Army envisages, for EUROFOR, a complex of forces (manoeuvre units and supports) at the maximum level of Brigade, according to the "on call" WEU formula. Their typical missions cover the entire spectrum of the possible interventions considered by the new western strategy of crisis management, from classical conflict situations to humanitarian missions.

EUROFOR's employment is envisaged in all institutional contexts (UN, NATO, WEU) also in remote theatres, but the fact remains that the main area of gravitation of the force is the Mediterranean basin.

Another element of the politico-military requirement is the capability of operating in joint environments, particularly in conjunction with EUROMARFOR, a multinational naval unit, whose working principles are similar to EUROFOR's.

In substance, the two Euroforces are the concrete result of a long and elaborate activity of study and coordination carried out during the past year and - above all - of the strong will to proceed on the road of multinational integration of the forces.

In addition to this initiative, being aware of the importance that planning the forces for the common European Defence is going to acquire in the short/medium term, I wish to mention also the concept of the so-called "Division for Europe", developed within our Army. The objective is to establish in advance a pool of Commands and Units - taken from the projection/reaction forces package of the Service - which can foreseeably be put at Europe's disposal, as Italy's contribution to the needs of the European Common Defence.

Therefore, the "Division for Europe" is naturally not the indication of an organic Major Unit, but rather the expression of a "concept" materializing in the overall availability of a complex of forces capable of expressing a Division-level contingent (2 Brigades and tactical-logistical support Units) flexible enough according to the scenario (1 or 2 theatres with different environmental and operational characteristics), sustainable for long periods of time (reaction capability of the forces), i.e. able to meet any security requirement outside the national borders, drawing from a pool of resources formed by two Intermediate Operational Commands, eight Brigades and an appropriate number of support units.

In substance, it is a project perfectly in line with the WEU's will to control highly

operational units, capable of operating in multinational and joint contexts, according to the NATO concept of Combined Joint Task Forces. The concept was worked out at the Atlantic Summit of 1994 and defined, in its organizational procedures, at the Berlin Summit of 1996 which was a milestone on the road to the conferment of real capabilities to the European defence.

In the future, in fact, it will be possible to have one or more joint and multinational military formations, assembled and structured in view of a specific operational objective. We will thus have the possibility and above all the capability of tackling a wide spectrum of possible tasks, with particular reference to the operations in support of peace.

If WEU is charged with conducting an operation, it will be in a position to avail itself of the NATO command structure, according to the said concept of "separable but not separate entities".

The experience made by SFOR in Bosnia, AFOR in Albania and KFOR in Kosovo - where the Army is very much involved, both with its own personnel, included in NATO Commands, and with the deployment of three national framework headquarters - is a significant demonstration of the validity of these decisions.

Especially the geographic closeness of our Country to the Balkan area compels us to make great diplomatic and politico-military efforts, in order to limit the conflicts in the area as much as possible, as well as to dampen and possibly prevent the spillovers of instability that could affect the peninsula.

In the Balkans there are at the moment more than 9000 Italian servicemen, who operate with the NATO-led missions of SFOR in Bosnia and KFOR in Kosovo, with additions in Macedonia and Albania, which include about 600 Carabinieri attached to the Multinational Special Units (MSU).

It is a considerable presence which last summer, at its peak, reached the ceiling of approximately 11,000 men.

If we add the nearly 250 Officers and NCOs engaged with the different UN, EU and military-assistance missions in various parts of the world, we can understand the considerable effort that the Army is making in order to contribute to international security. This effort appears to be even more remarkable if one considers that the Army at the present time commands about 30,000 "professional" soldiers employable in missions outside the national territory, and also if one takes into account the obvious need of ensuring the forces' rotation on a four-month or semi-annual basis, in order to alternate operational employment and reconditioning periods.

On the other hand, the Italian strategy for the Balkans envisages several other politico-military initiatives, which will require additional personnel, such as strengthening the recently established Italian-Slovenian-Hungarian multinational land Brigade, which in due time will also include Rumanian and Austrian forces; the active participation in the multinational Peace Force for Southeastern Europe, which is about to be established with contributions from Greece, Turkey, Rumania, Bulgaria, Albania and Macedonia. The additional protocol to its constitutive Treaty was signed in Athens by the 7 Ministers of Defence in January 1999.

Finally, we should not underestimate the programme of technical-military assistance in

favour of Albania for the reorganization of its Armed Forces, which started in May 1997 with a joint mission, nor the similar programme for Malta, which has been going on for over twenty years. What we said so far shows that the various politico-military crises occurred in former Yugoslavia have highlighted the shortcomings of the Old Continent, a great common economic area, but still politically divided and militarily limited.

The conflicts in the Balkan area have shown that the Europeans have not yet extended their conception of the world to the new times, and that the North-American ally is still a fundamental and indispensable partner for the definitive solution of any situation of crisis or emergency.

The problem is thus how to make the "European pillar" grow, within a strong and renewed transatlantic relationship, based on a more equitable sharing of responsibilities, a relationship which, I believe, remains irreplaceable for any "security" strategy, as is proved by the operational experience made in the Balkans.

The Armed Forces, and the Army in particular, are very willing and committed to support the politico-diplomatic efforts of our Country in this direction, as our troops and Commands, perfectly integrated in the multinational SFOR and KFOR, have proved, receiving the appreciation for their professionalism, not only by the allied Commanders but by the local population and civilian authorities as well.

In substance, one cannot ignore that in the last years we have witnessed a renewed appreciation of the military instrument, as a concrete expression of the Nation's will to participate in the construction of a European project of security and defence.

In the light of the new politico-strategic context, the Army's main objective is to transform the traditional military instrument, organized and trained for the defence against a predetermined and direct threat to the national borders, into a dynamic system, capable of carrying out very different and complex missions in the modern scenarios. In the post-bipolar world, in fact, also the Italian Army is destined to play the role of an active protagonist, in direct support of the national and international security policy for the preventive and remote control of conflicts, within the organizations to which the Country belongs. All this will have to take place in operational theatres located almost exclusively outside the national territory and in new employment contexts, normally joint and multinational.

With a view to this, only in the long-term can our Army, expression of a Nation placed at the centre of the large Balkan-Mediterranean area of instability, remain a producer of forces trained for deterrence. In the sphere of the international control of conflicts, on the contrary, it tends to become an instrument capable of expressing real operational capabilities at short notice, in line with Italy's greater participation in the decisions of the international community. This role, in the military sector, can only be the result of contributions of ideas and forces: forces quantitatively and, above all, qualitatively credible, integrated in a joint environment and integrable in multinational complexes of forces, and therefore fully able to compete with the major Allied Nations.

Lieutenant General Francesco Cervoni



THE ARMY OF 2000

The Current Situation

Lecture by the Deputy Chief of Staff of the Army at the Institute for High Defence Studies
(Rome, October 8, 1999)

I am honoured to have the opportunity of addressing an audience so highly qualified and to report on the state of the transformation process of our Army. It is a subject of high topical interest about which - by coincidence - we can talk just after the approval of the law instituting the **women's military service** and the introduction of a government project for realizing **professional Armed Forces**.

In particular, referring to the latter measure, we must consider the immense change it implies, also from the cultural point of view. As a matter of fact, we will go from an "**Army of the People**" - an idea which accompanied the Country during the entire process of national unification and lasted up to these days - to an "**Army for the People**".

An Army for the people, which will carry out the **threefold and very important task** of providing the armed security for the community, giving the indispensable support to the national policy for the solution of conflicts, and contributing to create the third pillar of United Europe.

All this concerns the present, but we should also remember that, until the abovementioned trends are transformed into decisions, the **Army's general target**, sanctioned by the Chief of Staff of Defence with the joint planning document, remains the realization of the model of a **mixed Army of 137,000 men**.

I will proceed in my presentation with the precise intent of examining the reference concepts according to which we have worked so far and will continue to operate also in the future. Therefore, I shall deal very little with organizational procedures or Regiments to be retained or disbanded; what I'm interested in, rather, is a clear understanding of the "**algorithm**" which led to prefer and select a particular organizational model. Thus I will discuss more in detail the completely new measures, which I feel are the least known, stressing - and this will be the core of the conference - the **Operational Concept of the Army**.

REFERENCE PICTURE

General Situation

Starting with the situation of the geostrategic picture, I invite you to observe - but I believe you all know this already - that the **events which have taken place in Europe** and, more in general, **in the world**, during the last years, have - in practice - upset the balance of the international relations, and obliged the main Nations and International Organizations to proceed to a radical

reexamination of their security systems.

This reappraisal is a dynamic process - subject to successive adjustments deriving from the international situation and the internal socio-political circumstances - based on **two basic principles** adopted by the Nation: "**active prevention**" and "**defensive sufficiency**".

The **first** principle, **active prevention**, is meant as permanent contribution from the military instrument to the nation's security policy; this applies both in the different phases of prevention/control/management of crises, and in defence of the national interests, independence and sovereignty. This principle, on the other hand, is clearly expressed and is at the foundation of the well-known **five main missions** assigned to the **Armed Forces**.

The **second** principle, **defensive sufficiency**, is meant as the maintenance of the minimal quantity of forces sufficient for deterrence and, failing this, for defence, i.e. for the fulfillment of the missions assigned. The principle is interpreted and applied within a communal perspective - with reference to the Alliance systems to which Italy belongs - and not with a purely national outlook. It must also be kept well in mind that the **recourse to multinational formations is now a set pattern**, necessary in order to have on hand a military instrument capable of providing capabilities which would be impossible to acquire autonomously.

In this regard, it must also be stressed that any military intervention on the international arena requires a broad political legitimation; therefore, the participation in multinational missions, aimed at supporting, from the military viewpoint, the political lines of action, assumes a very high priority. Thus, it is possible to say that, in the picture outlined, the Army has taken the configuration of "**producer of ready forces**", constantly adjusted - in terms of efficiency/effectiveness - to face situations much more diversified than in the past, in distinctly joint and mainly multinational contexts.

These two principles lead to two further principles which at conceptual level are at the basis of any possible process of transformation of the Instrument: **economy and sustainability** of the forces, whose conceptual synthesis is represented by the **Task oriented** principle.

In substance, since the reference to a well-defined and quantifiable threat is not available, the operational instrument must be planned according to modular criteria, in order to create **pools of operational forces**, corresponding to the operational functions envisaged (presence and surveillance, contribution to international security and stability, participation in the common security system), and from which the necessary modules can be assigned, as required by the mission, through their association with Command and Control modules, equally necessary for meeting the needs presented by the level of the missions to be carried out.

Gentlemen! This is a fundamental concept, which involves - and will increasingly involve - a remarkable conceptual leap, a different way of thinking, entirely **devoted to the operational effectiveness** of the instrument and utterly uninterested in functions which are no longer necessary. Going back to the reference picture, and before looking more in depth into the present situation and the future prospects of the Service, we should reflect both on the role that Italy intends to assume in the international environment and on the relevant consequences concerning the military instrument. In other words, the real dimensions of the Army theoretically derive - conceptually, at least - from the **missions assigned** which, in their turn, stem from the role the **Country wants to play**. But, at the end, the desirable could show up to be unsustainable; in any case, the final dimensions of the military instrument will always have to be coherent with the abovesaid principles. As a first approximation, one could say that a reduction preventing the Army from carrying out its missions implies, as a consequence, a reduction in the geostrategic role of the Country.

At this point I want to introduce, just as an indication, a subject that in the near future will be of great interest to all of us. The process of European integration is now well on its way, and will take place on the basis of certain so-called convergence **parameters**, among which of paramount importance are the financial ones, since they will permit to build the first pillar of the Union, i.e. the economic integration, the internal-security ones, which constitute the second pillar and, last but not least, the parameters relevant to the common security, necessary to achieve the third and fundamental pillar. The convergence parameters connected with the third aspect have not been

exactly defined yet. Certainly, among the convergence parameters to conform to, there is the percentage of GNP to be assigned to Defence, the technological capability, the areas of excellence of each nation, but also the size of the military instrument. In this sense, I believe, the dimensions of the Italian Army will have to be comparable to those of the major European partners.

Therefore it is evident that, in order to have the possibility of participating with a significant role in the European security policy, the Italian land instrument must necessarily meet those parameters. Thus, the instrument must keep its effectiveness and cannot go below certain levels, otherwise it will be unable to partake, with a leading role, in the decisions made within the alliances to which we belong. It is also clear that, since we are talking about politico-strategic options, all these considerations essentially concern the top-level politico-strategic management. It is **our responsibility, in any case, to do the best we can with what we have.**

The Army's multinational commitments

As far as the multinational commitments of the Service are concerned, we should specify in advance that the decisions made in the sector of multinational cooperation imply as many commitments; the decisions also describe the procedures for performing some joint missions and, in the last analysis, have an impact on the quantity and quality of the instrument. In this sense, the general situation outlined has implied - in practice - the increase in the Army's participation in diverse multinational initiatives, which can be summarily grouped into **NATO, WEU and UN initiatives**, as well as "ad hoc" international initiatives.

Starting with the **NATO commitments**, it must be considered that the NATO Reaction Forces are still the most substantial commitment from the quantity viewpoint. These commitments could still increase if and when the current studies on the constitution of a second ARRC for the Euro-Mediterranean area take shape.

Furthermore, the participation of the Service in EUROFOR is a well-established fact. The joint politico-military initiative of Italy, France, Spain and Portugal falls within the project for the development of the European Security and Defence Identity. It is an "on call" Force not higher than Division level, employable in a WEU, NATO or UN/OSCE environment, oriented towards the execution of "Petersberg missions" which, as is known, include humanitarian missions, PSOs and management of crises. The maximum contribution of the Service is one Brigade plus divisional supports. Incidentally, it is in substance a "**Task oriented**" planning Staff, capable of taking on the control of the forces assigned.

As regards WEU, Italy has earmarked a Division Headquarters and relevant support units, plus 2 Brigade-level formations. A certain number of different units has also been made available for the possible constitution of a humanitarian Task Force.

Anyway it must be stressed, before proceeding to additions, that the obligations connected with the participation in these forces must always be considered **alternative and not simultaneous commitments.**

What has been said so far concerns the past. Recently, **other multinational commitments** have been added to these well-established agreements.

The first is the constitution of the Multinational Land Force (MLF) with Hungary and Slovenia, a "framework" formation based on the Hq. of the "Julia" Alpine Brigade, support units provided by Italy and one Infantry Regiment from each Nation. The signature of the relevant agreement will take place shortly.

The second commitment concerns the participation in the Multinational Peace Force South East Europe (MPFSEE), which includes seven Nations and is oriented towards interventions in the Balkan area for Peacekeeping missions, therefore excluding the peace-enforcing operations envisaged by Art.7 of the UN Charter.

A third and even more recent undertaking is the adhesion to the UN Stand-by Forces High Readiness Brigade (SHIRBRIG), destined to operate for Peacekeeping missions under the UN aegis.

The Army's contribution to both **MPFSEE** and **SHIRBRIG** is a "framework" manoeuvre-Regiment, reinforced by the appropriate tactical and logistic support units.

THE NORMATIVE FRAMEWORK

Moving to the reference documents and directives for the general planning of the instrument, it must be made very clear that in the past, at the origin of the planning process, there was a serious lack of political directives; at present this is not completely true anymore. As a matter of fact, **two directives** have been recently issued, and they are a great step forward on the way towards the optimization of the planning process; the planning must always be the outcome of precise political intents, which the Chief of Defence transforms into **missions** and, at the end, the appropriate instrument to accomplish them is realized. In this particular case, the normative references at the basis of the evolutionary process under way are the "Ministerial Directive" and the **"Guidelines for joint planning"** of the General Staff of Defence.

The **"Ministerial directive"** stresses the need to increase the "Joint" and "Combined" integration of the military instrument, in order to improve its capability of contributing - together with the allied and friendly Countries - to the solution of local crises and conflicts raising, by doing so, the security level. The directive, in substance, takes in and strengthens the concept of common security, and points to multinational cooperation as the main direction to follow.

The **Guidelines for joint planning**, recently approved at political level, besides defining the five abovementioned missions, describe (or, more appropriately, one could say "described") a mixed-structure model of military instrument (volunteers and conscripts) for a total of 230,000 men. In particular, as far as concerns the Army, a total of 137,000 men has been fixed, and the existing 13 Brigades have been confirmed, 8 of them being Projection/Reaction units.

On the basis of the mentioned documents, the Army General Staff has worked out its own directive - **Planning Objective up to 2005. Programming Objectives for 1999-2001** - which sets forth the Army Chief of Staff's Operational Concept. From this originates the last phase: the project for the adaptation of the land instrument, which will be described later and deals with the definition of the objectives and relevant organizational procedures.

Finally, and this confirms the extreme dynamism of the evolutionary process of the military instrument, one must take in due account the very recent governmental initiative on the transition to an **entirely professional model**. In this regard, it must be preliminarily made clear that the uncertainty about the future developments of the situation increases the difficulties as regards general planning and the seventeen-year programming of the investments. In practice, the problem consists in planning an instrument on the basis of situations data that are very likely going to change in the medium/long term. At the present time, the most sensitive issues are **the times** of the transition from a mixed to a purely professional model, and the **yearly inflow of volunteers** which, among other things, will have a determinant bearing on the achievement of the preestablished force goals. In order to obviate these uncertainties, it was necessary to adopt an integrated planning model, permitting to adjust the organization of the Army to the contingent situation in the shortest possible time, safeguarding - first of all - the capability of performing the missions assigned.

THE ARMY'S OPERATIONAL CONCEPT

The most important aspect at the basis of the transformation under way is the Army's Operational Concept. The guidelines envisaged by the Ministerial Directive and the missions for DGS planning have confirmed the full validity of the Army's Operational Concept proposed in 1997, which fixes the **operational tasks** of the Army, **the forces necessary** to fulfill the commitments - at present, 13 Brigades (1 armoured, 1 reconnaissance, 1 airmobile, 1 paratroop, 3 alpine and 6 mechanized), Intermediate Operational Commands and the necessary tactical and logistic

units - the force categories and the support **priorities for their preparation** as well as, finally, **the maximum sustainable operational efforts** in the various employment situations.

Starting with the operational activities stemming directly from the well-known joint missions, it should be clear that the most important among them, since they are very likely to occur, are the **2nd** (participation in the common security system) and the **3rd** (contribution to the defence of the external interests and to international security and stability). These missions give rise to a wide spectrum of employment options connected with the **combination of various parameters** among which: the type of operation (from traditional to Peace Support Operations); the operation theatre which, as is now normal, could be located outside the area pertaining to the Atlantic Alliance; the operational context, which increasingly envisages joint and multinational formations.

The other components and development phases of the Operational Concept derive from the missions assigned, also taking into account the lessons learned from the previous missions.

First of all, the functions of the Army which are, in synthesis:

- qualified, active and reassuring presence on the national territory, in order to exercise a constant vigilance, giving a continuous contribution to the general security and welfare;
- projection of forces to crisis areas in multinational contexts, to help prevent conflicts (Peace Support Operations and humanitarian missions in a broad sense);
- participation, with the forces assigned to this tasks, in the common defence within the Atlantic Alliance.

As we have repeatedly pointed out, the wide range of tasks and the differentiation of scenarios require formations especially structured for specific tasks. This means that the units, albeit grouped in standard formations at their garrisons for training and administrative reasons, must be appropriately **selected and organized into task forces**, on the basis and at the onset of the operational contingency. The organization for implementing the concept issues from the second component of the **Operational Concept**, i.e. the **classification of the forces by category and state of readiness**.

It should be added that, as in Bosnia and in other missions in general, peace-support operations are often of long duration. It is necessary, therefore, to envisage the periodic rotation of the units and to organize into several sections the capabilities and formations intended for projection. Now, owing to the present scarcity of resources, the rotation is based on three phases: **preparation, employment and reorganization**. However, this solution is only temporary: the final arrangement will include a fourth phase of general technical training. As a consequence, **the life of a Regiment, considering a four-month employment phase, will be gauged on a period of 16 months**.

Thus, the Service has based its operational planning **on the Capability-Packages** concept, meant as reservoirs from which the forces can be drawn when needed. Finally, the order of completion of the various packages is a clear indication of the Army's operational decisions.

In particular, there will be **four packages**:

- Projection Forces for out-of-area Operations, consisting of projectable Commands and units, readily employable, capable of operating in multinational and joint contexts, manned by volunteers (**priority 1**);
- Reaction Forces, destined to the Immediate and Rapid Reaction Forces of NATO, for the management of crises in contingency areas of the Alliance, also manned by voluntary personnel (**priority 2**);
- Presence and Surveillance Forces, for territorial control, manned at present by conscript personnel, capable, if required, of giving their contribution to the common security and defence.

The last group of capabilities, the Defence Package, includes the Command and Control structures as well as the tactical and logistic units indispensable for "linking up" and employing the military instrument as a whole in the common security and defence.

Consequently, the **Capability Packages** are the solution to the problem of general planning, since we are aware that there is no more a predetermined enemy and, therefore, the operational missions can only be planned in general terms. Therefore the military instrument cannot be built

according to a specific mission, nor be quantitatively and qualitatively gauged in function of a specific enemy. This concept has entailed the transition from the old "**on-threat planning**" system to the present "**capabilities planning**" system.

However, considering today's extraordinary dynamism, one should pursue **flexible solutions**, fit for successive adaptations. In this sense, the distinction between Reaction and Projection Forces is essentially a planning expedient, and it refers mainly to the contingent availability of professionals and modern equipment. Besides, presumably as from 2003, this distinction will not make sense from several points of view.

To conclude this subject, it seems opportune to make a last reference to the maximum operational effort possible, and therefore to the employment options envisaged by the Army's Operational concept, which can be summarized as follows:

- in the framework of Peace Support Operations, **employment, in a single Theatre, of a division-level complex** (projection IOCs) **on two Brigades plus support units** (or two Brigades in different Theatres). These forces will be organized as "Task Forces" - also multinational if necessary - projectable and sustainable as regards logistics and unit-rotation, fit for carrying out long operations. Possible further commitments in other Theatres (as the current ones) are possible, but with significant limitations relevant to: size of the commitments (reduced), distance from logistic bases, availability of forces and appropriate Command and Control Capabilities, type of mission, logistic sustainability. **Therefore, commitments above the main ones cannot be simultaneously sustained in the long term;**
- within **Art.5 operations** outside the national borders: **employment of forces envisaged by NATO plans** for contingency areas. In this respect, it must be noted that this option is to be considered an alternative to the previous one;
- in case of threat to the national territory: **employment of all available forces;**
- in the performance of tasks connected with territorial control; priority employment of third-category forces.

The Operational Concept has produced the well-known medium-term **main planning objective** for the operational forces, fully based on the "task organization" which, we should remember, is the basic organizational pillar of the future Army, i.e. the **Division for Europe**.

In this connection, one should be cautious, because the Division for Europe is not an organic unit, but only a **virtual concept**, which can take shape through the body of forces necessary to make the main effort on any Operational Theatre. This, in other terms, means having at one's disposal a "mix" of light, heavy, armoured, reconnaissance and air-mobile units. Furthermore, the forces of the Division for Europe must permit an in-Theatre rotation on the basis of four shifts. However, considering the actual need to support other minor theatres with other forces (and this rationale cannot be questioned if we look at the current example of the two main Theatres and the two additional, albeit less demanding ones, in Albania and Timor), we see that **another Brigade Hq.** is necessary.

Therefore, the Division for Europe should include eight different Brigades plus support units, able to provide their capability of intervention in all conceivable scenarios, outside the national territory, with a medium-term outlook, and another Brigade-level Hq. for planning purposes only, destined to perform specific missions - such as Albania's - with forces and logistic units taken from the capability reservoirs. The latter role will be played by the other eight Brigades. On the one hand, in fact, the rotation must be based on a stretch of four periods while, on the other, the lessons learned from the recent missions teach us that the critical sector is that of the Command and Control modules, more so than the manoeuvre modules.

Naturally, the Division-for-Europe's Command and Control would be entrusted to one of the Intermediate Operational Commands.

THE EVOLUTION OF THE ARMY

Talking about the transformation project, it is important to say that, everything considered, if it wants

to keep the capability of carrying out missions outside the territory, the Army's minimal size can be assessed in **nine Brigades**, plus the presence and surveillance Brigades.

Such is the "Army" instrument, described in the integrated planning document. As we said, it will be implemented according to the "Capability Packages" project, therefore concentrating mainly on the forces more likely to be employed rather than on the others. All would go well if the indeterminacy of the external factors were not complicated by that of the internal factors typical of the Country; for example, **there are doubts about the duration of the transition** from the mixed model - on which we are currently working - and the entirely professional one, not yet formally approved but ineludible, on which we have been working for a long time. The last but not negligible aspect of financing the transition has not yet been clarified. Thus, to consider an instrument capable of fulfilling its missions but based on a rigid structure - therefore unlikely to be adaptable to the possibly substantial changes in the situation - would be useless.

As a consequence, the Army Staff is going to define the general planning-objectives in the directive: **"Planning Objectives" up to 2005. Programming Objectives for 1999-2001**". In substance, the question is to prepare a volunteer/conscript mixed model, based on a Force level of 137,000 men, **capable of evolving towards an entirely professional model**.

It can be noted that there is a clear reference to 2005, which casually coincides with the time considered for the suspension of conscription. Everything will go smoothly if the terms are confirmed, the funds are allotted, the volunteer-boosting laws are approved and the number of conscripts remains proportionate to that of volunteers. But it is very unlikely that everything will go according to plans; at any rate, a further reduction in the number of conscripts is possible, owing to the present law on conscientious objection and the areal limitation on the employment of conscripts.

In conclusion, the project aims at achieving an employment of resources compatible with the "integrated planning" model (still 137,000 men for the mixed model), suitable for the transition to the professional model, without further studies, but rather through programmed reductions. **A model within another.**

This implies the introduction of a **minimal integrated professional model**, meant as the conceptual and organizational response to the possible reductions connected with the professionalization process, a model which tends to achieve an instrument capable of meeting the standards discussed above.

The **minimum model** - and this is the new concept - must surely be contained "a priori" into the mixed model, in the sense that it constitutes its basis, from which (with subsequent additions) it will be possible to reach "from the bottom" the 137,000-men integrated model, covering, therefore, any possible intermediate model.

In short, we can say that the working procedures start from the minimum project, are extended to the maximum one through the addition of modules, and envisage the definition of a number of intermediate models, equal to the number of years which separate us from professionalization, in order to provide - year by year - balanced forces in line with the established priorities. This will be done considering that the transition, in terms of human resources, could be more difficult than the final model. The impending drop in the number of conscripts could cause further temporary cuts in personnel, which could not be offset by the recruiting progression of volunteers, and would require that the forces available be made credible. The fact is that we are discussing a "Chinese boxes" project, a coherent, flexible progressive plan, at least partially completed in every year of the transition, which permits to provide (at any given moment) an Instrument fit for fulfilling at least the most important missions.

The Operational Instrument

Operational Forces

With reference to the Army's functional areas, it seems expedient to continue with the illustration

of the current situation and future prospects of the **Operational Forces**. As was mentioned before, the operational component is transformed on the basis of the "**Capability Packages**" project (Projection, Reaction and Presence). The **Projection Forces' units are already entirely made up of volunteer personnel**, while the **Reaction Forces will have to wait until 2005**. It could have been done earlier, but the shortage of conscripts makes it mandatory to see to the support area as well. These forces, as a whole, consist of **nine multi-branch Brigades** - albeit the "Sassari" Brigade's formation is reduced - plus the relevant supports, and are destined to become the "hard core" of the Army; furthermore, they are suitable for making up different types of Task Forces, for employments outside the national territory which can be prospectively envisaged in the medium term. In practice, these are the forces necessary for constituting the Division for Europe, capable of operating in any operational context.

The remaining 4 Brigades, equally important, belong to the Forces for territorial defence and are at present manned by conscripts. When and if the Army evolves towards a professional model, those Brigades **will progressively be replenished with volunteers**.

The Command and Control organization of the Operational Forces at present includes a Command (COMFORTER), established for the preparation and employment, and possibly the management, of the whole Land Operational Forces, also in joint contexts, if so decided but, at any rate, in prevaillingly land Theatres. Subordinate to COMFORTER are 4 **Commands** of major units, called Intermediate Operational Commands. The Operational Forces are subordinate to the **COIs**, which, in peacetime, are responsible for their preparation and training.

The first one, the Projection Forces Command (**COMFOP**) can be expanded in a joint and multinational sense, and is tasked with operations outside the borders as Command of a generic Force of Intervention, or as Hq. of the Italian Division assigned to the NATO Reaction Forces.

The Alpine Troop Command (**COMTA**), also projectable and expandable, can replace COMFOP in case of prolonged interventions, or help to replenish it.

Two other Command and Control structures, The Operational Defence Forces Commands (**COMFODs**) attend to the operational requirements on the national territory.

Under COMFOTER, besides the COIs and the C4-IEW Command, there is a Support Command (**COMSUP**), responsible for the coordination and control of the operational and logistic support units. These supports include the Antiaircraft-Artillery Command, the Army-Aviation Command, the Artillery and Engineer-Group Commands, as well as the Logistic-Support Command.

However, this organization can change if it becomes necessary to have on hand Commands capable of assuming the direction of a multinational force, in line with the **Task Oriented** principle. In other words, talking about concepts, the need to have Staffs capable of operating in external Theatres, in a framework of force rotation, would make it opportune to relieve some COI-level; projection-oriented Commands from the tasks connected with the ordinary management of the units.

This gives rise to what can still be considered a study option, based on: Operational-Forces Command, Projection-Forces Command - only for planning purposes and conduct of operations outside the national territory, without directly subordinate manoeuvre forces - Defence Commands for the preparation and employment of the Forces on the national territory. All Brigades, together with their support, will be subordinate to this Command and be uniformly distributed on the territory.

The very transition to the integrated 137,000-men model will entail significant suppressions or requalifications of units in various sectors. Suffice it to think of **the need to eliminate no less than 22,000 positions**. Although this is not the proper place, we can make a synthesis of the measures which are going to be needed:

- relocation of some Brigade Hqs., in relation to the recruiting areas of volunteers;
- rationalization of combat-support and support units, in particular artillery and logistic formations, according to the priorities expressed by the Operational Concept.

- inevitable transfer of some units to the southern area.

Logistic Organization

A few words about logistics. The present structure is organized on two **levels**: the **support** level, subordinate to the Logistic Inspector; and the **adherence** level, entrusted to the Command of the Operational Forces.

The support level is organized in two Area Logistic-Commands, a limited number of maintenance-supply bodies, with areal responsibility, and some national "poles", responsible for the executive logistics of specific systems.

As regards the adherence level, considering that its logistic units carry out equally exacting activities, the executive organs at intermediate COI and Brigade level remain necessary only as reservoirs of resources for the adjustment of the logistic capabilities of forces destined to specific missions.

An important innovation in the logistic-support sector will be the recourse to civilian firms for mess services and the maintenance of infrastructure and vehicles. The objective is to **maximize the cost/effectiveness ratio**, relieving the military personnel of routine jobs, in order to employ the human resources in strictly operational activities.

General-Support Area

We believe it is more appropriate to devote a greater attention to the **general-support area**. The will to safeguard the **operational component**, the only productive one, entails the convinced decision to simplify, and also reduce - more significantly - the other components of the Army, through a rationalization process, whose only parameter is the efficiency of the instrument. Any residual redundancy, meant to fulfill non-vital functions, will therefore be eliminated.

The general-support area, conventionally called "**Superstructure**", consists of the school/training, territorial and logistic organizations, all three necessary to support the operational one.

Within the general-support area, the top organization of the Army includes **3 Inspectors** - subordinate to the Chief of Staff - responsible for specific areas (Schools, Branches, Logistics) and **3 Military-Region Commanders** (North, Centre, South).

We shall not examine in detail the ISPEL logistic support area, not because we consider it less important, but because the changes in that sector correspond exactly to the constitution of the Inspectorate. It is more interesting, instead, to dwell on the three well-advanced projects for transforming the superstructure, which are aimed, on the whole, at simplifying the activities for the support and training of the military personnel. Furthermore these projects, in view of the quantitative contraction of the instrument, pursue new and more economical organizational responses. Lastly, considering the Army's irreversible professionalization process and the remarkable shortage of conscripts, they aim at making further simplifications - i.e. reductions - possible, through the rationalization of the Army's Command line.

The projects mentioned above concern, in particular, the rationalization of the sector of **Conscription, Recruitment, Replenishment Forces, Infrastructure, State Property, Personnel Training and Specialization**. They intend, as a common denominator, to create, for each of these sectors - considered so many macrofunctions - a number of specialized organizations, responsible for fulfilling all activities relevant to each macrofunction on the whole national territory.

As regards, in particular, the effects of this reorganization on the Army's territorial Organization, we can say that, as a result of the measures described above, it will undergo a deep change. The functions and tasks still in the province of the territorial area will be absorbed by the new structures, while their constituent Bodies and Commands will be fused or reconfigured within the new Organizations.

The streamlining just outlined is necessary, because the present territorial Organization, very important in the past, now does not meet the requirements of a more flexible Service, undergoing a

growing professionalization. In view of this, the solution adopted reorganizes three vital sectors of the current transition-phase, and creates **three command levers** permitting the sharp regulation of the processes aimed at completing the current professionalization.

We refer, for example, to the crucial role of **recruitment promotion**, which intends to ensure the human resources qualitatively and quantitatively adequate to the requirements. Another critical element of the entire system is the **infrastructural sector**, which, at the moment, meets neither the real needs of the units nor the quality levels required by the personnel's **living standards**. Last, to make an example and without presuming to be exhaustive, we should mention the need to confer a unitary character to the **organizations entrusted with training and specialization**, in line with what has long been done by the major western Countries.

Let's proceed to a more detailed examination of the various sectors:

School/Training Area

The creation of the national **TRADOC**, slightly different from the foreign models, is an important goal, which has been discussed for years and, at last, appears to be within reach of the project of renewal bravely undertaken in 1997. In short, the project envisages the reorganization and rationalization of the school/training area, in both the managerial and structural structures, attaining the creation of a single organization, responsible for the entire national territory, in order to achieve the unitary management of the functions of:

- training of personnel;
- validation of the operational capabilities and training level of the units;
- study and development of the doctrine (rules of employment, procedures, employment of equipment, systems and materials);
- simulation (research and development, employment of dedicated systems);
- contribution to the development of forces, equipment and systems.

The single Army organization envisaged for the school/training area will therefore be realized by assembling the structures that are at present subordinate to the Inspectors of Branches and Schools, and will consist of 3 levels:

- **Inspectorate for Training and Specialization**, a central Body located in Rome;
- **Deputy Inspectors**;
- **Schools**, with their connected Bodies.

The realization of this structure is affected, essentially, by the implementation of the measures involving infrastructural interventions, transfers of large numbers of personnel and the ratification of organizational measures, whose development times are often very different from each other.

Thus, it will be necessary to develop the project by different phases, which should permit - by March 2001 - to do away with the present two Inspectorates (Schools and Branches), and establish the Inspectorate for Training and Specialization, under the direction of an Inspector for Schools and Branches.

Recruitment and Replenishment Sector

The project for the revision of this sector plans to attribute the functions of recruitment and replenishment of the units, as well as the validation and promotion functions (with the addition of conscription, as long as it remains in force) to a single organization, responsible for the entire national territory.

The Army Organization entrusted with Conscription, Recruitment and Replenishment Forces (**RCF**) will therefore be based on three levels and consist of Bodies/Commands obtained through the transformation of Commands already existing in the territorial organization. In particular:

- an **Inspectorate for Recruitment and Replenishment Forces**, a central body resulting from the transformation of a Military-Region Command;
- **3 RCF North, Centre and South Interregional Territorial Commands** - resulting from the

modification of as many Military-Region Commands;

- **16 RFC Regional Territorial Commands**, based on the present (or about to be established) Regional Military Commands.

The **Military Districts** and connected **Conscription Bodies** will be grouped together and made to coincide, after their reorganization and reduction, with the Interregional and Regional Recruitment and Replenishment Forces Commands.

By November 2000, if the project and its relevant activities proceed without setbacks, the Programming and Verification Group, entrusted with the organizational activities, should be transformed into the "Activation Nucleus" of the Inspectorate for Recruitment and Replenishment Forces.

Infrastructure and State-Property Sector

The third and last project for the revision of this sector is a fundamental aspect of the Army's development. In synthesis, the idea is to unify the function relevant to the realization of the Service's infrastructural objectives and the function dealing with the State-Property issues, into an organization responsible for the whole national territory, in order to improve the overall efficiency of this sector.

Also the organization in charge of Infrastructure and State Property will be based on three levels, and made up by Commands and Bodies obtained through the transformation of preexisting organs of the Territorial Organization. In particular:

- an **Infrastructure Inspectorate**, as its central body;
- **3 Commands of Areal Infrastructure**;
- a certain number of **regional infrastructural Units and Sections**.

The Organization for Infrastructure and State Property will have to ensure, in general terms:

- unitary and global management of the Service's entire real estate;
- working activities, including those concerning State Properties;
- issue of an "infrastructure doctrine";
- employment of the assigned personnel and, finally, supplying of services to the users.

The new structure should start functioning in 2001, with a progressive assumption of responsibility and the simultaneous discontinuance of the old structure connected with the territorial organization.

C2 Organization

In short, **the Army's Command and Control System** must be able to meet requirements connected with the conduct of operations, the preparation of the instrument and its general support.

Starting from 1997, a certain number of "key figures", responsible for each of the Service components, have been determined.

In particular, only **eight key figures** are now subordinate to the Army Chief of Staff, instead of the previous 22, but the territorial organization (based on the Military Regions) is still organized "by functions".

At the end of the current transformation, the Army Chief of Staff will be able to count on the support of a kind of "**board of directors**" made up of a limited number of general officers, respectively responsible for the operational aspects (**Land Operational Forces Commander**), training and specialization (**Branch/School Inspector**), support (**Logistic Inspector**), recruitment and replenishment (**RCF Inspector**), infrastructural aspects (**Infrastructure Inspector**).

However, the final objective is **to have three Commands only**, subordinate to the Army COS: **Operational Forces Command, Logistic Inspectorate, Regulations and Training Inspectorate**.

This can be achieved, in a rather long transitory time, by establishing some special Organizations, destined to manage specific areas at the difficult moment of change, guaranteeing the necessary

gradualness of a decidedly revolutionary plan. At the end of the transition, they will join the three main Commands, for the performance of their respective tasks.

CONCLUSIONS

To conclude, I wish to repeat that purpose of this presentation was to expound the conceptual content of the Army project, which has not been given an official name yet; it could be: **the Army for 2005**. We shall see.

Therefore, the boring enunciation of organizational measures has been avoided. This, perhaps, could have been more interesting for the individual listener; but those measures can be understood only if one understands the reasons behind the changes. This also because the present references for the probable transition to a professional system are sufficient for planning purposes, but completely inadequate to provide certainties.

Similarly, for reasons of time, other crucial subjects have not been discussed, such as, for example: the possibility of enlisting volunteers and having the relevant legislative measures approved, since they are necessary to promote their recruitment.

What is meant is that in this sector, as in the others concerning the Army, difficulties and problems will be pointed out fairly and with sense of responsibility and the most appropriate technical solutions will be proposed, in order to do the best we can as our sense of duty suggests, with the resources assigned.

But it should be known that the Army is ready for the change, with studies, projects and activities already in progress. For instance, the figure of the **One-Year-Volunteer**, proposed and studied by the Army Staff, has recently been approved and introduced. This is a temporary measure, adopted to offset the shortage of conscripts (particularly in the North-East), contributing, at the same time, to acquire forces that could be employed outside the national territory, perhaps in not very highly-operational contexts.

The One-Year-Volunteers, in substance, are young conscripts, willing to serve for 12 months, with no limitations in terms of destination and employment, whose pay is 50% of the Short-Term-Volunteers' salary, which is not bad, considering they serve only two months longer than the normal conscripts.

More transformations are possible or conceivable, but they are long-term ones (more than 10 years). Suffice it to think about the construction of the European-security pillar and the technological evolution; these factors could even lead to a completely new way of devising and structuring the forces. In what is, after all, the "future around-the-corner", the Brigades could be quite different from the present ones.

In a picture as dynamic as this, we confirm that the Army's inspiring principles are essentially of an operational nature and directed towards efficiency.

But the Armies, or rather the Armed Forces, consist, first of all, of **men** and **feelings**. In this frame, it is right to ask of everyone a conscious sense of duty and participation, in order to reach the proposed goals. We particularly need participation, which is born of knowledge. Similarly, it is necessary to do everything possible to support the personnel, both from the moral and material point of view, during a time of changes which is not to be without hardships and sacrifices.

If we fail in our purpose, the whole Army will have failed. And this would not be right, because today, also thanks to the measures adopted during the last years, the Army is already a **credible and efficient force**, capable of expressing and supporting, simultaneously, four operational missions outside the borders.

And this must obviously be done without stopping the machine, continuing and persisting, instead, the steady, progressive and constant improvement of its components. Being responsible for the Army General Staff, I am proud and I thank all the men in the Army (Officers, NCOs and Troops) for what they do every day.

Major General Roberto Speciale

AN ARMY FOR EUROPE

by Claudio Graziano *



Tomorrow's army belongs to Europe. It will be based on competence and combat capabilities, necessary for maintaining prestige within the Alliance with credibility and dignity.

The Italian armed forces and the army in particular are undergoing an extraordinary change both for speed and intensity.

Under other circumstances we already knew "epochal changes" and we know that for the last ten years the Military has been continuously revised. However last century's and today's changes could have been hardly imagined. This process includes many issues generally addressing national policy but also international security policy.

In Italy key-elements include the shifting from a people's army to an army for people, changing from a conscription system to a mixed recruitment basis both on conscripts and voluntaries (this was the aim of 1997 and 1998 plans) which will finally result in a 100% professional Army. This process is still to be ratified by Parliament, but we can say the professional army is required, i.e., by:

- lack of conscripts (negative birth-rate)
- military service which is currently understood as a personal choice
- reduced service (ten months are inadequate for training)
- prejudices in committing conscripts to even low-risk out-of-area operations

- lack of general consensus

At the international level there are political and strategic reasons deriving from the changed geographical strategic situation and from a different principle of security.

European Foreign policies have become very dynamic and sped up common security, ESDI and CSEP. This had an influence on national decisions made in terms of security and led to international extraordinary changes in the Military, including:

- prevention and remote control of crises and conflicts (this prevents

local problems from turning into regional conflicts which would pose a threat to national (or community) interests in general

- changing of the conscript-based army into an army capable of deploying its units anywhere, anyhow and anytime.

This has an absolute influence on national security. Now in order to make an appropriate analysis of the latest national and international topics we shall focus on ESDI process, and in particular on the issues influencing the army and its requirements.



Leopard Tank from the German Armour Brigade in Kosovo

ESDI

During the Helsinki summit the Council of Europe reasserted the EU political will agreed in Cologne. Capabilities were needed to keep international peace and stability without duplications, as decided in Petersberg and made official in Amsterdam.

Consequently member states will have to commit their military both to EU and NATO.

In order to successfully meet this requirement the already existing national and multinational capabilities are to be reorganised and increased for carrying out missions and managing international crises, also by using assets available from the NATO if necessary.

Member countries were invited to focus on the following key-elements to give EU a crisis-

management high capability:

- projectable forces (troops, equipment and logistic support must be usable abroad);
- sustainable forces (rotation and support to the units in the theatre). This implies that forces generally available at different levels of readiness for Europe-led security missions shall be augmented;
- interoperability (national forces working within multinational units);
- tactical and strategic mobility

Rigth.

Helicopters from the Italian AVES during Alba Mission.

Below.

Bosnia, French troops using Italian weapons during a joint live-fire exercise.





(respectively referred to forces' capability and to projectable air, ground and navy units);

- flexibility (conflicts ranging from the almost symmetric and high density to low density other than war conflicts). This implies a technological supremacy which also contributes to interoperability;
- survivability (unfriendly environment and attacks - by means of equipment, procedures and operational efficacy);
- Command and control (planning, organising and conducting an operation in any operational environment with Joint and

combined units).

Consultation procedures were set in Helsinki for supporting single nations in reaching their goals and assessing their results.

Following to the Helsinki start, nations have been making an analysis to set the long-term goals. Although it was not said officially, it can be assumed that these long-term goals can be taken as common reference points for national planning now and that in the future will be a single common standard. In terms of security this pattern is similar to the one followed for European integration of economies.

Lastly it is worth noting that said capabilities, strictly connected to technology progress and investments, can be acquired also thanks to the NATO Defence Capability Initiative (DCI).

As a guideline, we can say that the political and military structure for the European Defence agreed in Finland is composed of:

- a Political and Security Committee responsible for strategic guidelines;
- a Military Committee whose members, for NATO member countries, are those taking part in the NATO Military Committee;



Column of US vehicles in Albania.

- a European General Staff (60 to 80 people) in charge of defining strategic options;
- the SHAPE General Staff responsible for planning operations guided by Deputy SACEUR (liaison between NATO and European Defence). When the Alliance is not willing to start an operation, Europe will avail itself of a General Staff from the participating nations;
- a Large Unit at Army Corps level (50,000 to 60,000 troops) possibly deployed in rotation within the theatre.

It is worth explaining this last paragraph directly involving the Italian Army and its contribution to the "Europe Project", and also to decide what kind of operational units are to be committed to the initiatives.

According to the Helsinki Chart - "Military Capabilities for Petersberg Missions" - European capabilities will be increased by

member states who set the following headline goals:

- by 2003 they shall be capable of rapidly deploying units up to Army Corps level (15 Brigades or 50, to 60,000 troops) for the so called Petersberg missions ranging from humanitarian aid to peace enforcement;
- they shall have command and control, combat or logistic support capabilities. If necessary, also navy or air force units shall be available to implement self-sufficient formations;
- member countries shall be capable of completely deploying their forces within 60 days and have earmarked and absolutely combat-ready light units to commit to the theatre;
- they shall be capable of sustaining their effort for at least 12 months;
- and they shall also have more operational and support units at a lower level of readiness for theatre rotation, which will grant the expected sustainability.

This is a milestone for the medium and long-term military

planning and is an ambitious and necessary goal for Armies and Armed Forces in general.

First of all it should be considered that the forces shaped above are perfectly in line with NATO strategic concepts and comply with the idea of neither decoupling nor duplicating efforts. In fact there shall be:

- Immediate Reaction Forces, small but with a very high level of readiness;
- Rapid Reaction Forces, fully deployable within 60 days;
- Main Defence Forces for supporting the on-going missions.

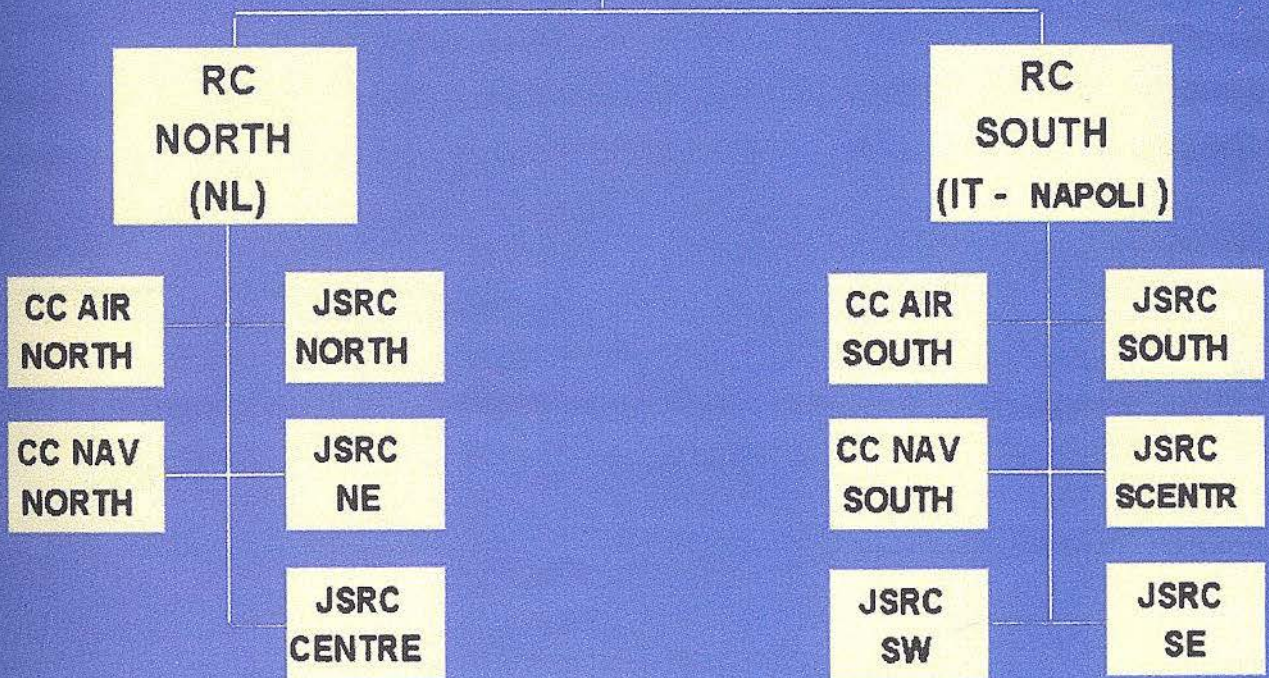
That means the Force Package for Europe will be made up of the same forces already committed to NATO (or earmarked for NATO-led missions), apart from some Command and Control assets. And this is because we cannot certainly think of Europe being committed to more than one EU- or NATO-led mission at once.

The Sustainability issue also deserves our attention. The Headline Goals say that a mission

Fig. 1

MILITARY STRUCTURE

SC EUROPE

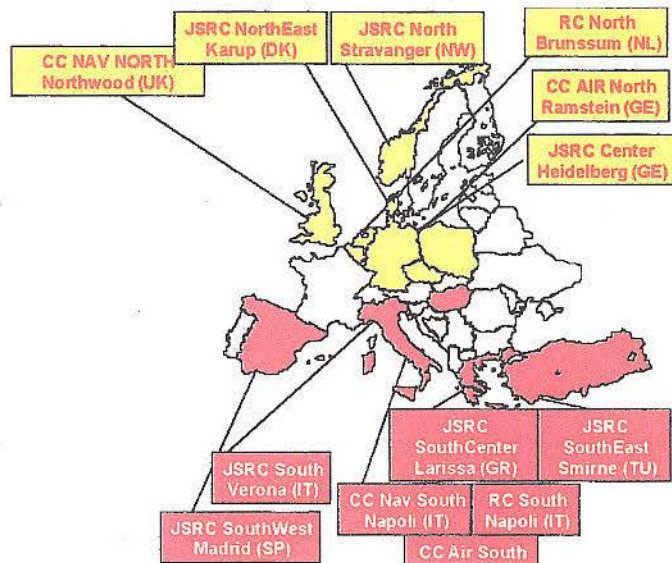


should be sustained for at least one year. "For at least one year" is a more flexible statement replacing the previous "Two year" one. It is a less precise but more likely statement. Depending on the situation a mission can last for as long as necessary and the forces' size and shape cannot be decided before something happens. Then, as a start, the mission is expected to be sustained for at least one year at Army Corps level but, as we learned from the experience in the Balkans, when a mission has an initial successful approach the forces can be reduced later on.

In other words, since the European Army Corps is to include 15 Brigades or 50, to 60,000 troops, member states are expected to earmark their units for Europe and sustain them for

Fig. 2

NATO COMMAND STRUCTURE





An Italian explosive-expert NCO at work in Sarajevo.

as long as necessary in the theatre. A different approach to the problem would not make a different planning of sustainability, on the contrary would result in a commitment considered unreliable.

NATO

As you know the latest NATO Command and Control structure is based on 2 Joint Regional Commands (JRC) and on 7 Joint Subregional Commands (JSRC) (fig.1).

During operations the Regional Commands are to act as CJTF HQ and assume the command of a Regional Joint Operation Area

(RJOA), while when there is a subregional operation going on the JSRC can be SRJOA HQ. We do not speak about the idea of projectable CJTF HQ, which has not been clearly defined so far and which probably is the future of NATO crises management capability. But there is no doubt that the latest NATO structure includes a large number of fixed Operational Commands (fig. 2) while the only NATO Rapid Reaction Command at Army Corps (tactical) level is and remains ARRC.

Moreover Today's NATO strategic concept conceived during the Washington Summit says that the crisis management capability is one of the basic security tasks of the Alliance, also during military missions.

Said capability requires a command and control organisation capable of conceiving and implementing military peace

support operations within short time and from within the theatre itself.

Moreover in today's strategic situation different forces must be deployed at different theatres at the same time to face simultaneous crises (lesson learned from Bosnia and Kosovo). But as I said before ARRC is the only Army Corps Command with a high level of readiness, earmarked for NATO and capable of planning and conducting very important and complex operations.

ARRC is assigned 10 Divisions although its Command and Control organisation can manage only 4. This is why it is actually impossible to use contemporarily all NATO potentials (apart from the fact that during operations ARRC has never controlled forces assigned by NATO planning). And this confirms that the idea of task organisation is universally accepted today. ARRC is then a

heavy structure not meeting today's flexibility requirements. Moreover, since it is located in the North of Europe, it is very difficult for it to act in the Southern area which, instead, will be the most likely requirement in the long term. We must also say that in Bosnia and Kosovo ARRC worked as Joint Command and that in both cases it was substituted by JSRC CENT located in the central northern area of Europe. And this confirms that NATO structures' locations are not balanced and that they are concentrated in central northern Europe.

Under these circumstances it is obvious and reasonable when we call for increased NATO command and control capabilities to be joint and projectable. And it would be also useful to have them in the South, i.e. near the potential area of crisis.

Going back to the force issue,

particularly referred to building up another (second) ARRC, NATO said there are 4 options:

- to build up a Command on the basis of a national framework included in the NATO line of command (as the ARRC is). This would be the most successful solution from the operational point of view but also the most expensive one;
- to build up or to use a multinational command also available to NATO when necessary. This could be done by means of the EUROCORPS in Strasbourg, once more in Central Europe and with only Spain from the southern area taking part in it;
- to have one projectable JSRC or more as if it was a projectable CJTF HQ as learned from JSRC CENT experience in Bosnia and Kosovo;
- to implement flexible Commands

by expanding the already existing Commands as AMF (L), for example, which is in Germany.

This article is not to say which is the best way to do it because the issue is complex and different national interests are at stake. Anyway we underline that some major NATO member countries, in particular those from the Centre and North of Europe, tend to build up the European forces and those earmarked for NATO on the basis of the already existing EUROCORPS and ARRC. In fact ARRC is a UK-national-framework Command with a very little US-share and could be assigned to Europe without any special increase of personnel or equipment.

Italian Mangusta helicopter in Petrovec, Macedonia.





French anti-sniper troops in Mostar.

I would like to conclude this analysis of the northern area by

saying that Germany is deeply rooted in EUROCORPS and is well represented in JSRC CENT, which today is the only projection-experienced JSRC (an experience made during the Cold War).

So, there would already be a Command and Control organisation up to Army Corps level for a Europe-led operation, available also for NATO missions, and there would also be units for rotation although they would not be enough.

These are only informal ideas good for managing the ongoing mission in the short term. But this is a temporary solution while waiting for the final Command and Control organisation of the Alliance, bearing also in mind that sharable-but-not-shared resources can be available to EU-led missions. In my opinion the final solution shall focus on the southern flank and on the strategic situation of security in southern Europe (fig. 3) And this is a widespread opinion within the Alliance. Now it is up to the countries from the southern flank, including Italy. They have to make factual proposals supported by a substantial political will.

Italy should have an important

WASHINGTON SUMMIT

Today NATO is to gravitate towards the southern region of Europe and that will be in the foreseeable future



Bersaglieri from the Garibaldi Brigade during training in Macedonia.

role in the European Defence Project and in the said second ARRC (substituting for today's existing one or rotating with it) when committed both to NATO and ESDI missions. Italy's role should equal the greatest effort made for PSO missions in the Balkans.

As to security this is the time for us to take more important responsibilities and to share them with Europe and NATO: not only shall we contribute operational units but also Command and Control leadership to crisis-oriented theatres. Italy should play a major role within such a new Command and Control structure which is to be built by re-qualifying an already existing NATO asset on the national territory or by re-qualifying another already existing

national Command and Control organisation in order to have it available for NATO.

This is a very hard commitment possibly leading to another epochal change of the Army based on national credibility and on the role the Italian Army will play in the future.

In this respect building up a Command similar to the already existing ARRC and located in the southern part of Europe would be important from the military and formal point of view and would notably increase the crisis management capabilities of the Alliance and give prominence to the Countries from the southern area. South-European Countries would take part in this so called Second ARRC and would strengthen their relationships and their interests which are strictly connected to the stability in the Mediterranean and in the south-eastern part of Europe.

Finally such a commitment by the European countries and the NATO member countries would show the factual will to build up the ESDI within the Alliance as it was said during the Washington Summit.

Obviously this second south-oriented ARRC, desirably located in Italy, would imply a greater effort from the southern Countries taking part in the initiative, especially from Italy, in terms of personnel and support units.

A PROPER BRIGADE

Before sizing up the Italian effort within both ESDI and NATO it is necessary to have a term of reference for general and operational planning.

Generally speaking, within NATO, projection capabilities below Theatre Command are referred to in terms of Brigades.



German and Italian troops at the Morini pass along the borders of Albania, Macedonia and Kosovo.

So, in theory, Italy would outnumber France because Italy is deploying 13 Brigades and France only 9. But this is not true because a Brigade can be differently organised and, depending on the Country, include from 3,000 to 8,000 troops and much more when we consider PSO-tailored Brigades which are based on national framework and which can be joint and combined and adjusted to particular operational requirements. In this case the Brigade can include a small or a large number of national troops (there were 2,000 in the Italian Multinational Brigade in Bosnia and 6,000 in the Italian Framework Brigade in Kosovo, for example).

But there is more: at the time of the two-block confrontation operationally speaking Brigades

were all-round units sized for a middle task. Today this approach does not work because since there is no clear threat and scenarios keep changing we cannot make planning on the basis of threats. On the contrary planning is based on operational roles and capabilities. This is the basic idea of Task Organisation and of Task-Oriented units which are tailored depending on requirements and given an appropriate Command and Control structure. In this way Brigades are valuable for planning and have their value from the operational point of view. Brigades would be a catchment-area from which capabilities can be drawn for any missions without organisational limits.

In this process we should also consider the European armies taking part in the European Security Defence Initiative. We are working together to find out areas of concurrence of interests.

When making comparisons with different countries we do not basis

our considerations on a middle task Brigade composed of a number of Battalions and staff simply because there is not a middle task brigade any more. On the contrary we do speak of a Proper Brigade built up as a real combat Brigade. the Proper Brigade will be composed of logistic, combat support (pioneer, signal, artillery, reconnaissance), special forces, administration and command and control necessary to gain and maintain operational efficacy. Moreover in order to have full combat capabilities the Proper Brigades should include manoeuvre units which are usually included in other Command and Control assets.

In this respect the British experience can be taken as an example. In fact, the UK battlefield foresees more than 20 Brigades of different kind, from those deployed in Ulster with territorial missions (in Italy we did the same during Vespri Siciliani operation) to those involved only in administrative matters or committed overseas or



Paratroops on duty during the "Vespri Siciliani" Operation.

only available as reserves. So only 7 out of 20 Brigades are full combat and actually projectable (in which case they would be

integrated with manoeuvre forces drawn from other packages) and they are the real general capability of the army as to high intensity, support, command and control and mobility.

This approach makes clear how many Brigades we can have by bundling units from other

countries like Italy. So we can easily understand whether the Brigades available from any country are generally reliable or simply empty boxes.

I am not going to give you figures or make considerations on what we need to have a full combat Brigade. We can form our opinion about it through figures from the most modern Western professional armies:

- France: 137,000 troops, 9 Manoeuvre Brigades (plus the German-French one). 14,000 troops/Brigade;
- United Kingdom: 112,000 troops, 7 Manoeuvre Brigades. 16,000 troops/Brigade;
- USA: about 500,000 troops on active service, 33 Brigades. 15,000 troops/Brigade;
- Spain: 115,000 foreseen by the Development Plan, 8 Brigades. 14,500 troops/Brigade;



Italian troops training with the French FAMAS in Bosnia.



A Mangusta A129 attack helicopter equipped for combat missions.

- Germany: 234,000 troops on active service, 27 Manoeuvre Brigades including 4 mobilisation-oriented Brigades and 4 Brigades at different readiness levels. A general deployment of the forces is based on the 505,000 troops as foreseen by the Defence organisation. In this case the outcome would be 18,700 troops/Brigade.

Only Germany seems to have a different situation. But if we put aside the mobilisation Brigades

also Germany will be as the rest of the western Countries. Moreover the idea of a Proper Brigade is basically referred to a full professional Army. Conscripts means more personnel unavailable for training; and this problem can be solved by increasing conscripts three-fold or, as it is in Germany, by deploying conscripts only as trained reserves.

When we take 15,000 troops as an average figure and when we think 13,000 troops are still an acceptable figure (all of them professionals and equipped with enough technology), it is easy to understand the possible size of an Italian Professional Army (this

applies also in case of a mixed army as the German) when operational tasks and combat forces capabilities are known.

This is an easy way to understand what an operational force needs to sustain its operational task. In the meantime we understand how difficult, or even impossible, a mission is when resources are not sufficient.

On this basis we can make some considerations:

- all European countries work with at least 8 full combat Brigades (Proper Brigades), which is the basic set to have 2 Brigades in rotation at two PSO theatres. This is also the case of

Bersaglieri alight from an armoured wheeled vehicle.

the UK where the Royal Marines Command (50% of which is made up by the Army personnel for all supports) is Brigade # 8. Moreover said countries have a reserve to meet special requirements;

- apart from the way chosen to build up a professional force, two theatres sustained at Brigade level- which is something less than today's situation - would require: 8 Proper Brigades plus a reserve for missions like Albania, East Timor, Lebanon, etc. Totally 9 Brigades! This is a common standard in Europe from the technical military point of view;
- an Army made up of 113,000 or 114,000 troops (the Italian army share out of 190,000 proposed by law for the three services) would result in the minimum number of Brigades to meet the aforesaid operational requirements. A smaller size would have a negative impact on mission capabilities and the standards which are not common yet but commonly agreed would not be met. The armies of the major European countries must be capable of providing 8 Proper Brigades to sustain the foreseeable projections. And there could be more Brigades fulfilling side tasks but not taking part in operations.

SIZE

Keeping that in mind, on the basis of capability we can now understand the minimum size of the operational forces the army needs to keep up with the European security.

And this is perfectly in line with the obligations Italy has along with its allies and deriving from the international organisations and from the undeniable engagement



in the Balkans and in other theatres.

A DIVISION FOR EUROPE

The greatest effort the Italian army can make for long-lasting Peace Support operations accounts for a Division HQ, Division level support and 2 Brigades deployable to one theatres or more.

These forces are task forces, also multinational, projectable and sustainable both as to logistics and rotation for long-lasting operations. More tasks in different theatres, as it is today, can be fulfilled if the commitment is small, the supply base is not far away and if there is an adequate command and control, if the mission can be logistically sustained and depending on the type of mission.

Therefore simultaneous secondary commitments are not likely to be sustained for a long time.

Sustainability influences directly unit and personnel efficiency.

Sustainability requires at least four units rotating in the operational theatre, and this is referred to manoeuvres forces and to Command and Control.

Four is the smallest number accepted by all European armies and implies the following procedure: Preparation for deployment, Deployment in the theatre, Recovery after the deployment, Training and operational level Check. We need, as I said before, 8 brigade level units for main theatres plus a relative command and control for meeting different requirements and including reserve manoeuvre force (i.e. the air-mobile force), plus special support and logistic units. This allows for rotation of the units and offers a wide range of forces (tanks, mechanised, mountain troops, airlift, paratroops, armoured) which can be drawn for tactical purposes depending on the operational scenario.

In conclusion the Division for Europe includes 2 Division level HQ, 9 Brigades, an adequate

Bersaglieri from the Garibaldi Brigade patrolling in Klina, Kosovo.

tactical and logistic support. It is made up of the same forces earmarked for EU-led missions for crisis management. In other words the Italian army can take part in the European Corps thanks to the capabilities acquired so far or which are being built up in the light of a Division for Europe. Initially it can take part in it with a Division HQ, 2 Brigades and supports sustainable with no time limit. More forces could not be sustained indefinitely and no other missions could be carried on simultaneously.

CONTRIBUTION TO NATO REACTION FORCES

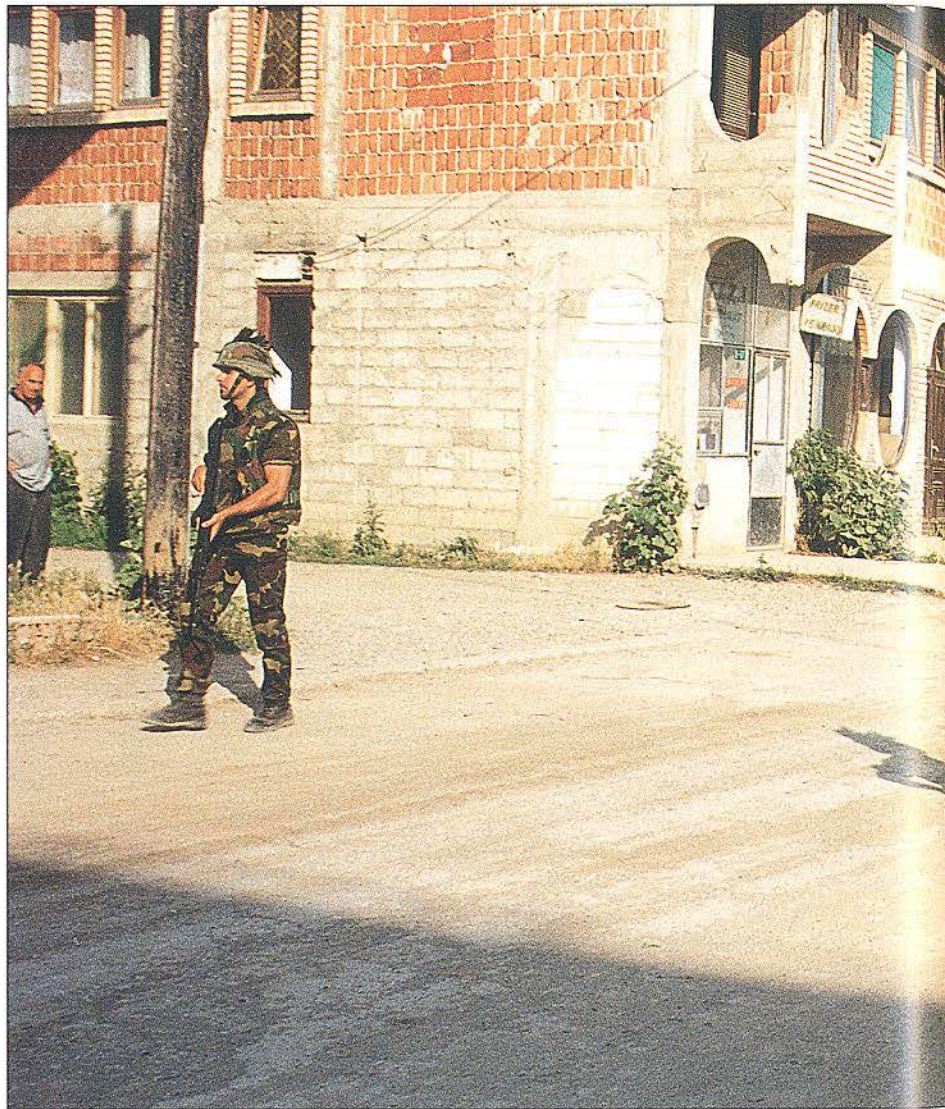
Today Immediate and Rapid Reaction Forces account for a Division level HQ and 6 Brigades plus supports. These forces are clearly alternative to the previous one because they are always drawn from the Division for Europe. On the basis of what was expressed in the NATO paragraph, Italian forces available to the Alliance are likely to be increased, at least qualitatively.

PARTICIPATION IN THE MULTINATIONAL FORCES

The Italian Army is also involved in multinational initiatives. This complex issue will be addressed in the future. Only the most important elements shall be outlined now.

Italy takes part in:

- EUROFOR along with France, Portugal and Spain. It is involved in Command and Control of a force for Petersberg missions from the member countries;
- the Multinational Land Force along with Slovenia and Hungary. This is based on a



framework from the Julia Brigade;

- MNFSEE, the peace force for south-eastern Europe. Italy is taking part in this initiative with a national framework regiment;
- SHIRBRIGADE, the Standard High Readiness Brigade available to the UN and in which also non European Countries are taking part. Also in this case Italy is providing a manoeuvre regiment plus supports.

These multinational initiatives require a greater commitment from the Army in terms of capabilities, staff training and interoperable forces. Briefly considering the largest package of forces (Division for Europe) and assuming that we cannot be committed to more than one of the aforesaid tasks at once,

the minimum size of the Army, apart from any duplication and having all the forces wearing two or even three hats (ESDI, NATO, MULTINATIONAL, NATIONAL), is of 9 Brigade level units (each of different type and shape) plus a number of command and control capabilities (from Brigade level on) and crucial special and logistic support.

It must be underlined that the 9 Brigades do not include territorial forces.

In this way operations like Vespri Siciliani could be carried on by forces drawn from the Division for Europe whose capability for international security mission abroad would then be reduced. This is something very important to focus on because the forces



available to EU will have to grant indefinite sustainability.

CONCLUSIONS

In conclusion we can say that today no clear decision has been made for the Italian professional Army, which would make planning very difficult even if there were no operational missions to carry on and the international scene was not as dynamic as it is today. Notwithstanding the lack of reference terms for organisation, the future international commitments and the requirements of future military capabilities are becoming clear.

From the technical point of view the Army and its General Staff are directing their resources towards

projection forces and the best solutions are being recommended to top-level officers and politicians.

The recommended 9 Brigades plus support include about 113,000 troops, which is a commonly accepted size for professional Armies. But in our opinion this can be only a start when we want to keep up with future commitments. Let's not forget that personnel work on a rotation-base and that the aforesaid desirable smallest number (4) is never respected, but 4 Brigades is the threshold to success and below it there is no successful operation.

Concluding I would like to say that any further reductions could be hardly made to the logistic administrative support because of

social reasons typical of Italy. For example civilian departments cannot sustain the operational area of Defence; moreover, when we make a comparison with Europe, in Italy the support rests too much on the shoulders of the military which has a negative influence on the available personnel in general and also on personnel available at the units.

□

* Colonel,
Chief, Planning Office,
Army General Staff

NOTES

(1) In this respect s. six articles included in 1999 Military Review Magazine with the title *Esercito Futuro - Piano di Sviluppo*.

(2) European Security Defence Initiative (WEO) - Identity (EU or NATO).

(3) Common Security Foreign Policy, including initiatives for a European security identity both at NATO and EU levels.

(4) The DCI is to prompt the modernisation of the military within the Alliance. In particular DCI aims at increasing member countries' force projection capability and their capability to face new challenges, basically by reducing the technological gap with respect to the USA.

The Defence Capability Initiative is focused on 5 issues:

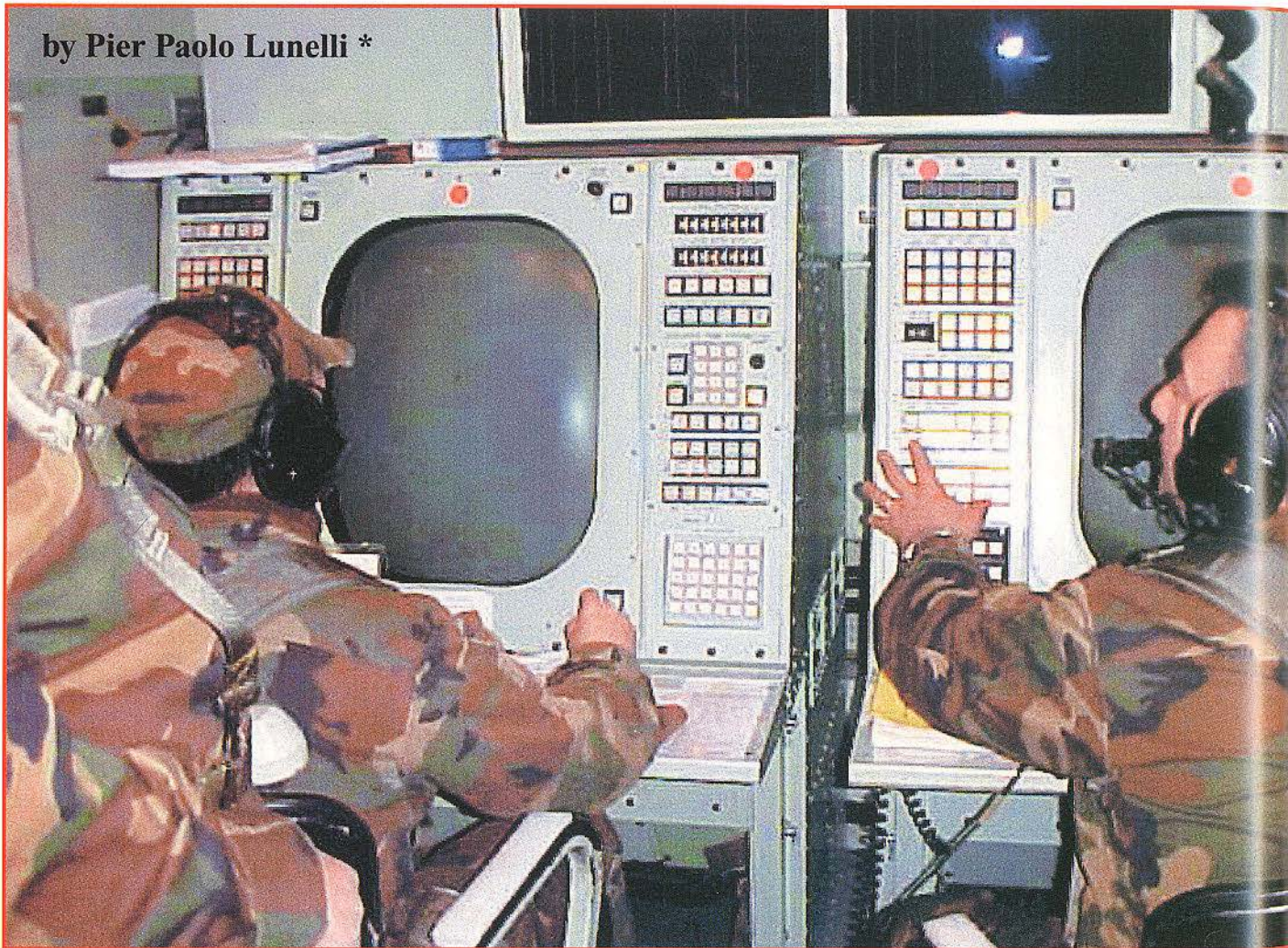
- mobility;
- sustainability;
- successful engagement;
- protection of forces and installations;
- Command, Control and Intelligence.

And it is made up of 58 sub-issues addressing both equipment technology and Cooperation between Command and Units. In this respect the DCI helps the European taking part in the global effort made by the Alliance. But it will make them capable of managing crises at European level.

THE BALKANS

ITALY IN THE FRONTLINE

by Pier Paolo Lunelli *



Last spring 11,000 troops were engaged in the Balkans, plus those deployed on other overseas UN missions. This commitment, together with the equally important contributions made by the Italian Navy and Air Force, highlights the role carried out by the Armed forces as effective players in the foreign policy arena. In the future we shall present an updated situation of Italian units committed to the Balkans and to East Timor.



Bari, March 24, 1999. The Control Station of the 4th a/a artillery Regiment and six fire units, which had been deployed along the Puglia coast for six months, were on a six hour state of readiness. The deployment of a/a artilleries was creating a certain concern among the inhabitants of Monopoli. The media, aware that an air attack was impending, were trying to find out indications when NATO would launch it. At 2 p.m. the BattleStation1 order was given and immediately passed out to subordinate fire units. Combat teams activated surveillance and tracking radars, launch teams wired and armed a/a HAWKS

missiles. After about ten minutes the fire units were ready to defend the national air space. Two journalists, previously sent to the Regiment Command Post, did not realize what was going on. They asked for information and wanted to know when and if the attack would take place. They went away disappointed shortly after 4 p.m. Some hours later, at 19:00 hrs. ZULU time, the skies over the Adriatic were crowded with aircraft: operation *Allied Force* had begun. There were 900 NATO aircraft in action over the Yugoslav Federation, the new battlefield scenario. Monitors clearly displayed the sorties of allied aircraft, which took off

from the Italian air fields and the aircraft-carriers stationed in the Adriatic to hit designated targets.

Only two days before the air attack the Tactical Command Post of the Garibaldi Brigade was airlifted to Macedonia (FYROM³), where the Serbian border was being defended. Two weeks later, also the Taurinense Brigade was deployed to Albania, tasked with humanitarian relief of the mass of refugees fleeing Kosovo. Meanwhile, in Bari, the general support and close support coordination Commands were set up. Thus in a fortnight 11,000 Italian Army troops were engaged on three fronts: Macedonia, Albania and Bosnia. Moreover, six

months later, a fourth front was opened in Timor East.

This article aims at highlighting the key elements of the operations which took place in 1999, an unprecedented year as regards the Italian Army's commitments, in the post second World War period.

DEVELOPMENT OF THE KOSOVO CRISIS

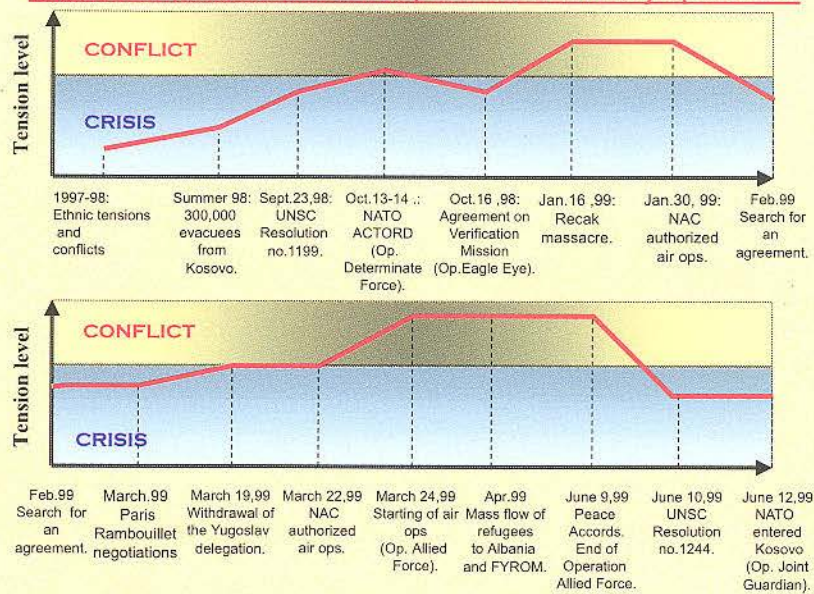
NATO operations in Kosovo started on October 13, 1998, when the Atlantic Council endorsed the *Activation Order*³ (ACTORD) against Belgrade, following a Serb counteroffensive in Kosovo, which had created about 300,000 refugees (fig.1).

After the cease-fire, agreed upon by Slobodan Milosevich and Richard Holdbrooke in October 1998, an OSCE-mandated *Verification Mission* was carried out by 1800 observers, who were sent to the area. In January 1999, however, the situation greatly deteriorated. The crisis reached its climax with the Recak massacre, where 45 Kosovars were shot dead. Said crisis escalated when William Walker, head of the Verification Mission, accused the Serbs of perpetrating a "crime against humanity" and was declared "persona non grata" by Belgrade.

The peace conference in Paris and Rambouillet did not reach the results hoped for and ended with the withdrawal of the Yugoslav delegation on March 19, 1999. On March 24, at 19:00 (Greenwich time), NATO forces started Operation "Allied Force" over the Yugoslav Federation, without the official authorization by the UN Security Council. Meanwhile KFOR⁴, based on HQ ARRC⁵, was preventively deployed on the Macedonian-Kosovar border, and also took over the tasks previously performed by the *Extraction Force*⁶, which had been operating in the theatre since December 1998. Shortly afterwards, due to

fig.1

Kosovo 1998-99: crisis development and military operations



the huge number of refugees seeking asylum in Albania, NATO started a humanitarian aid operation, called *Allied Harbour*.

On June 13, president Slobodan Milosevich signed the peace agreements submitted by the EU envoy Martti Ahtisaari and the Russia envoy Viktor Chernomyrdin. NATO forces entered Kosovo, with the approval of the UN Security Council, on June 12, the first day of the operation "Joint Guardian", tasked with restoring peace in the region. Serb troops, completed their withdrawal from Kosovo on June 20 1999, in line with the signed agreements.

The list of the main events (see table 1) which took place from the beginning of the crisis clearly shows how complex they were, especially if compared with the events leading to the Dayton accord in 1995. It is now advisable to try putting together the puzzle of NATO strategy in the Balkans, by systematically linking the several successive operations.

THE ALLIANCE STRATEGY IN THE BALKANS

The Alliance has undoubtedly

had to make every effort to prove its usefulness since the end of the cold war. The *out-of-area* intervention in Bosnia, the implementation of the concept of *Combined Joint Task Forces*⁷ (CJTF), the *Partnership for Peace* initiative, the downsizing of the C2 structure are important milestones in the process of adaptation to the new geo-strategic scenario.

However, the really new element of this intervention policy in the Balkans is the official adoption of the concept of "**humanitarian interference**", even within a sovereign state, like the Yugoslav Republic. The Alliance's end state is clear: "stabilizing the Balkan region".

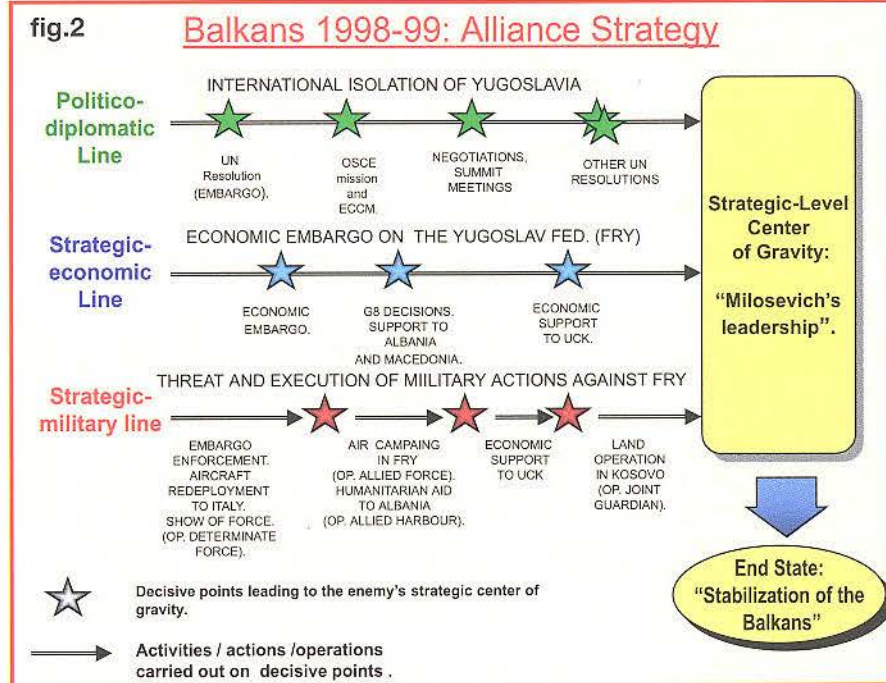
A center of gravity and some strategic lines can be identified in the Kosovo crisis (fig.2). After NATO's partial success in Bosnia, the strategic center of gravity was Milosevich's leadership. To strike this center of gravity politico-diplomatic, economic and military strategic lines were adopted. The UN Security Council resolutions, the OSCE, EU and ECMM interventions belong to the politico-diplomatic line. The embargo, enforced by a UNSC resolution, the G8 decisions and

the unwillingness to provide reconstruction aid belong to the strategic-economic line. Lastly, Bosnia's stabilization, (Operation *Joint Forge*), actions against Yugoslavia (Operations *Determinate Force* and *Eagle Eye*, followed by Operation *Allied Force*), the intervention in Kosovo and Albania (Operations *Joint Guardian* and *Allied Harbour*) and the enforcement of the economic embargo are the military reply to Milosevich's counter moves. It should be noted that the decisive points on the three strategic lines were synchronized, i.e. the Security Council resolution enforcing the embargo affected both the strategic-economic and the military line (deployment of a fleet in the Adriatic).

The description of the strategic-military line now follows, starting from the C2 structure established by NATO.

ORGANIZATION OF A C2 STRUCTURE FOR THE OPERATIONS IN THE BALKANS.

SACEUR delegated the task of implementing peace accords to CINCSOUTH, who took up the

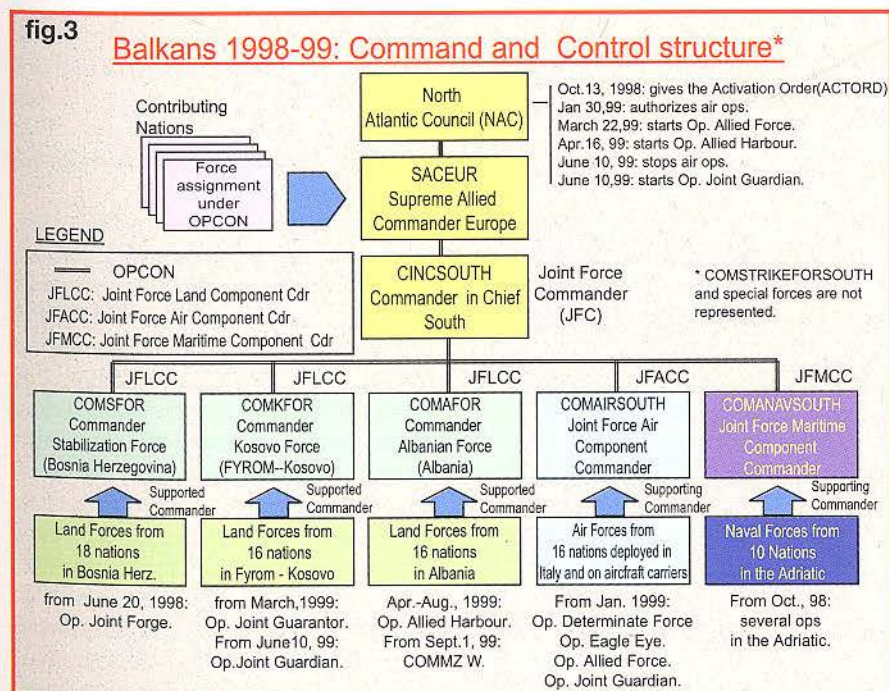


function of **Joint Force Commander (JFC)**, supported by air, land and maritime Component Commanders (JFACC, JFLCCs, JFMCC*), as shown in fig.3. COMAIRSOUTH was appointed *Joint Force Air Component Commander (JFACC)*, responsible for air missions in the theatre of operations. COMNAVSOUTH, in his capacity as *Joint Force Maritime Component Commander (JFMCC)*, was

responsible for maritime operations.

The COMARRC⁹, appointed as one of the three *Joint Force Land Component Commanders (JFLCCs)*, was tasked with implementing the *Military Technical Agreement (MTA)* and controlling land forces in Kosovo, as COMKFOR. The AMK (L) Commander was appointed COMAFOR (*Commander Albanian Force*), responsible for Operation **Allied Harbour**, to give humanitarian relief to the refugees who sought asylum in Albania. Twelve nations contributed their troops to the KFOR land component: Belgium, Canada, France, Germany, Great Britain, Greece, Italy, Norway, the Netherlands, Hungary, Poland, Portugal, Russia, Spain, Turkey and the United States. On June 30, about 24,000 men were deployed in Kosovo and another 10,000 in Macedonia. Sixteen nations took part in the *Allied Force* air operations: Belgium, Canada, Denmark, France, Germany, Great Britain, Italy, Norway, the Netherlands, Hungary, Poland, Portugal, Russia, Spain, Turkey and the United States.

Lastly, eight vessels of eight different nations, belonging to the STANALFORMED¹⁰ for sea



control actions in the Adriatic, took part in maritime operations. Moreover, two *Task Forces* made up of 16 vessels from 10 nations, carried out demining operations in the Adriatic sea. All naval forces were put under the COMNAVSOUTH operational control.

It should be stressed that the Balkan theatre was divided into **three land operation areas**, each under a Land Component Commander (fig.4). In the **first area**, in Bosnia Herzegovina, Operation *Joint Forge* has been going on since June 20, 1998, under COMSFOR operational control.

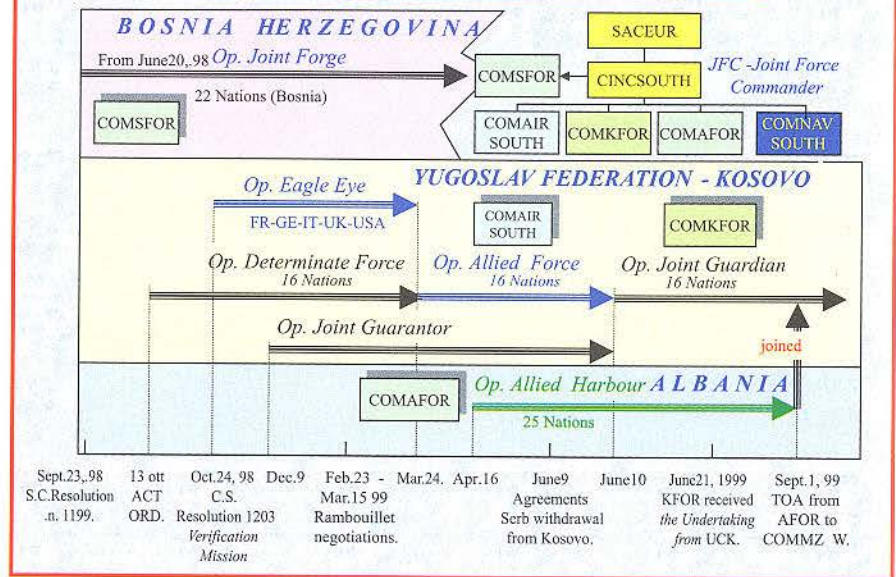
In the **second area**, comprising the Yugoslav Federation –FYROM– a series of operations were carried out: the first, called *Joint Guarantor*, initially aimed at guaranteeing the safety of OSCE personnel belonging to the *Verification Mission* in Kosovo and then of the FYROM-Serbia borders; the second, connected to the previous one and called *Eagle Eye*, was to perform air reconnaissance missions with the employment of unmanned aerial vehicles from October 30, in support of the above-mentioned *Verification Mission*; the third, an aeronaval operation called *Allied Force* (16 nations) was tasked to carry out an air campaign against the Yugoslav Federation; the fourth, called *Joint Guardian*, was led by COMKFOR operating in Kosovo as Land Component Commander (JFLCC).

In the **third area** of operations, Albania, Operation *Allied Harbour* took place, based on AMF (L) level, to provide humanitarian aid to Kosovar refugees fleeing their country, following air raids and the Serb counteroffensive on the ground. The forces previously serving with *Allied Harbour* joined Operation *Joint Guardian* on September 1, 1999 at its *end state*, following the establishment of the *Communications Zone West HQ*¹¹ (COMMZ W HQ), in support of the operations in Kosovo.

COMAIRSOUTH and COMNA-

fig.4

1998-99: Operations in the Balkans.



VSOUTH, Commanders of the air (JFACC) and naval (JFMCC) components respectively, carried out the functions of *Supporting Commanders* to the Commanders of multinational land components (JFLCCs) in Bosnia-Herzegovian (COMSFOR), Kosovo (COMKFOR), and Albania (COMAFOR). A detailed analysis of the four operations carried out by NATO in 1999 now follows: *Eagle Eye*, *Allied Force*, *Joint Guardian* and *Allied Force*.

OPERATION EAGLE EYE

Eagle Eye: an eagle eye on Kosovo. This operation allowed for implementing an air surveillance system over Kosovo with the employment of strategic reconnaissance aircraft (U2) and unmanned vehicles (UAV), in compliance with the agreement signed in Belgrade on October 15, 1998.

The NATO Activation Order (ACTORD) for *Eagle Eye* was issued on October 30, 1998, and the operation was carried out under the responsibility of SACEUR, who delegated operational control to CINCSOUTH, who, in turn, exercised it through COMAIRSOUTH

(Naples) and the *Combined Air Operation Center* (CAOC) in Vicenza.

Moreover, the *Kosovo Verification Coordination Center* (KVCC) was established at Kumanovo (FYROM), tasked with planning, coordinating and exchanging information with the OSCE observers. On November 26, 1998, the inauguration of the center was attended by NATO Secretary General (Javier Solana), SACEUR (General Wesley Clark) and CINCSOUTH (Admiral James Ellis). The KVCC was supported by nine Nations (Belgium, Canada, France, Germany, Great Britain, Italy, Norway, The Netherlands, The United States of America).

Operation *Eagle Eye* was assigned a wide range of tasks: first, monitoring Serb security forces' activities through IMINT¹², supervising the disposal of weapon systems and the enforcement of cease-fire; second, providing situational awareness through data gathering, validation and analysis; third, drawing up daily reports to be transmitted, through the chain of command, to the North Atlantic Council, KVCC and OSCE. Missions and sortie profiles were coordinated with OSCE and *Kosovo Diplomatic Observer*



Camouflaged Field Radar Station.

Mission (KDOM) observers, who were deployed in the region. The information gathered was shared by OSCE, KDOM and KVCC. *Eagle Eye* ended on March 24, 1999, and was replaced by the aeronaval operation *Allied Force*.

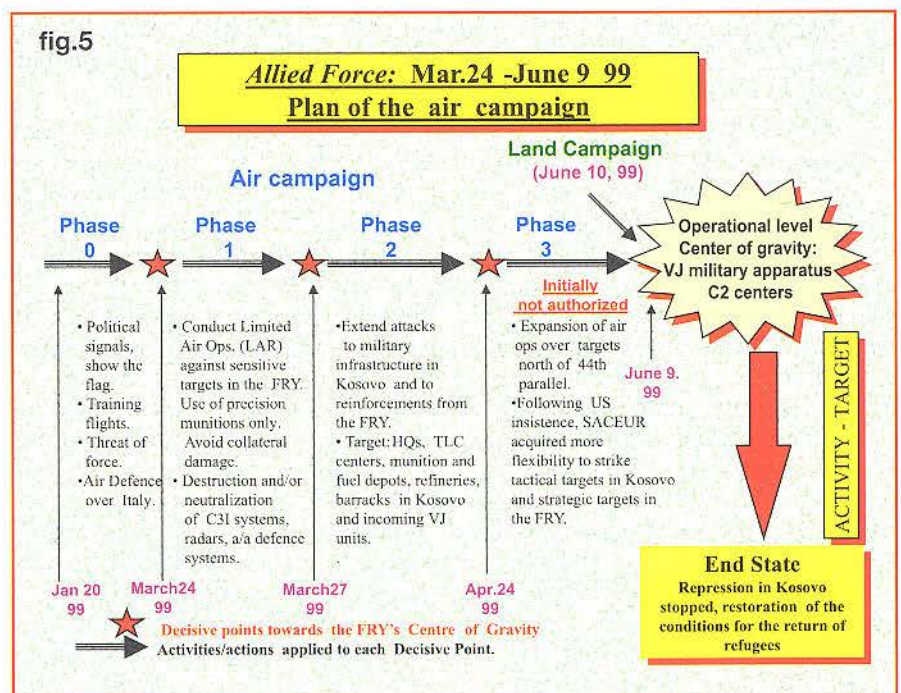
OPERATION ALLIED FORCE

Allied Force: a 16 nation joint allied effort. It was an air operation developed between March 24 and June 10, 1999. A total of 1055 aircraft (730 USA) belonging to 14 nations were employed and most of them were redeployed to Italian air bases¹³ or aircraft-carriers¹⁴. The operation had a series of targets in Kosovo: first, putting an end to all military, violent and repressive actions; second, obliging Serb military and paramilitary forces to withdraw from the region; third, compelling Yugoslavia to sign an

agreement allowing for the presence of an international military force and the repatriation of refugees. The operational-level strategic target was to “degrade and neutralize the military and security organization set up by Milosevich for ethnic cleansing

purposes”. SACERUR delegated the task of reaching this target to CINICSOUTH. The latter, in turn, transferred operational control to COMAIRSOUTH, who exercised it through an Air Operation Agency, called *Combined Air Operation Center* (CAOC) in Vicenza.

fig.5



The initial plan (code 10601 *Allied Force*) envisaged the performance of an operation divided into 4 phases¹⁵, with a *D-day* order to be issued not before January 20, 1998, when the forward redeployment of attack air assets was to be completed. Binding political constraints were imposed on the operations. In fact, an authorization at Atlantic Council level was necessary to move from one phase of the campaign to another. The aim was that of preventing the conflict from escalating, limiting collateral damage and the risk of losing pilots. These phases were assigned different targets and operational areas.

Phase zero was given the green light on January 20 and tasked with training activities within aircraft redeployment areas. It was aimed at sending a strong political warning, i.e. NATO was prepared to resort to the use of force, if necessary. An air defense capability had preliminarily been set up on the Italian territory against a possible Yugoslav intervention.

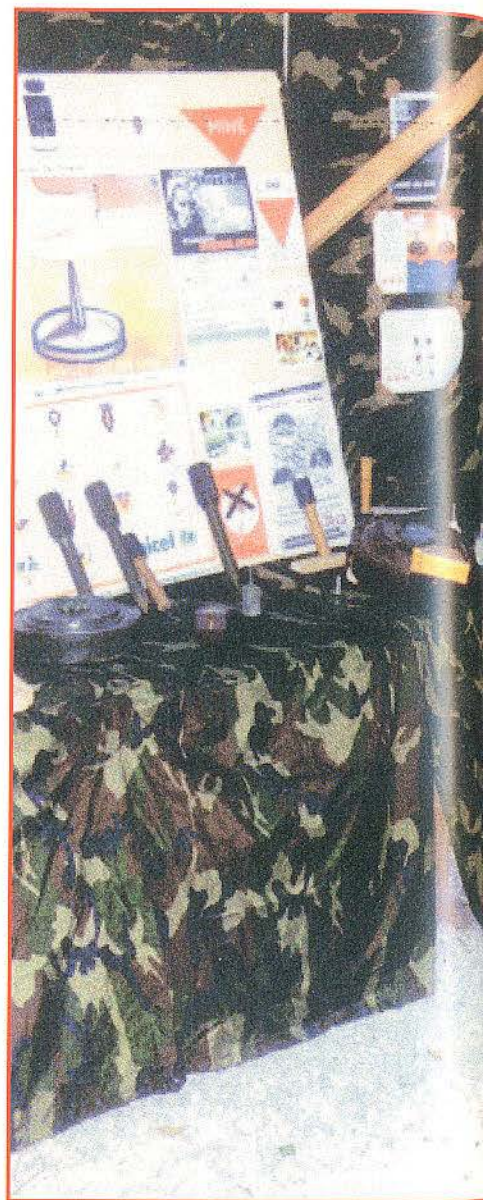
Phase one¹⁶ started on March 24, 1999, when air operations were given the go ahead. It was named *Limited Air Response* (LAR) and had to carry out "surgical" operations with the employment of "stand-off" precision-guided munitions. In this phase, which included the Italian air space defense as well, the 4th a/a artillery Regiment was employed to counter a possible threat against the Puglia coastline. The *Targeting* process, set up to minimize collateral damage, had a political aim mainly, which was deemed feasible by some NATO nations: to force Yugoslavia to join the peace table in a short time. Phase one did not follow the traditional doctrine, according to which a major air effort should be applied to the center of gravity. The "phased" concept of operation was therefore not in line with the principles of military doctrine, such as surprise and mass

concentration. This entailed a prolonged campaign, a protracted effort and the risk of possible losses.

Following the authorization from the Atlantic Council on March 27, **phase two** began and attacks were also waged against the military infrastructure in Kosovo and reinforcement forces (HQs, telecommunications, munition depots, power stations and barracks), including logistic support sectors. Attacks were carried out at an altitude of over 5,000 m to avoid Serb a/a defense, missions were performed during the night with low-risk flight profiles. Only after a series of collateral damage, as when a refugee convoy was hit at Djakovica, were new tactics adopted and attacks waged at lower altitudes, thus increasing pilot risks¹⁷.

These air raids, however, gathered consensus around the pro-Milosevic internal front and did not succeed in stopping the ethnic cleansing campaign which was then underway.

Given Yugoslavia's intransigence, the decision to widen the air campaign was taken by the NATO Summit of April 23, 1999. However, **phase three**, providing for extended air missions against targets north of the 44th parallel, did not receive authorization from the North Atlantic Council. Therefore, SACEUR was only authorized to hit a greater number of targets within the scope of phase one and two. The target list became longer, to include support sectors, such as petroleum storage facilities, railways and roads, power lines, electric power stations, command and control centers. On May 7 the Chinese Embassy in Belgrade was bombed by mistake, as officially declared. On June 3 the terms of the peace accord were accepted and allied nations decided to temporarily stop the air campaign on June 9, if the withdrawal of Yugoslav forces from Kosovo was confirmed. When the KFOR entered Kosovo,



Experts teach the population how to deal with dangerous explosives.

Operation *Allied Force* changed its name to *Joint Guardian* and COMAIRSOUTH became the *Supporting Commander*.

OPERATION JOINT GUARDIAN AND THE GARIBALDI BRIGADE

Joint Guardian: a joint guardian in Kosovo. It is the code-name of a NATO operation aimed at ensuring the full compliance with



the *Military Technical Agreement* (MTA), signed on June 9, 1999 by NATO and Yugoslav Federation's authorities, within the framework of UN Security Council (UNSC) Resolution no. 1244. *Joint Guardian's* task, which is still in progress, was to enhance the stabilization effort in the Balkans, promote cooperation and security in the region to support international community efforts. This operation was authorized by the North Atlantic Council on June 10, 1999, following the successful outcome of the aeronaval *Operation Allied Force*, and aimed at creating the conditions necessary for the return of refugees, alleviating the

suffering of people, and laying the foundation for a long-term sustainable peace in Kosovo.

Joint Guardian was the follow-up to two operations. The first, called *Joint Guarantor*, had to initially guarantee the safety of OSCE observers assigned to the Kosovo Verification Mission, with the employment of a multinational force in FYROM; then, from May 24, it was tasked to defend the Serbia-FYROM border. The second operation, called *Open Doors*, was a humanitarian aid mission in FYROM, set up to provide emergency aid to refugees fleeing Kosovo.

The mission assigned to the

Garibaldi Brigade in the *Operation Joint Guardian* had the following "key tasks":

- to guarantee freedom of movement within its AOR in the North-Eastern sector (fig.6);
- to monitor and verify compliance with the rules set by the *Military Technical Agreement* (MTA) and the *Undertaking* concerning the UCK demilitarization and transformation process;
- to support the UNHCR, in humanitarian aid matters;
- to maintain law and order within the AOR, until civil authorities restore normal conditions in the region;
- to control the internal borders



and those with the Yugoslav Republic.

According to Brig. Gen. Del Vecchio, Commander of the Garibaldi Bde, three main elements characterized the Brigade's operation in Kosovo. First, Brigade-level units were put under the direct authority of the *Joint Force Land Component Commander* at Army Corps level. In essence, even if the force comprised about 45,000 men, no division-level intermediate structure was set up, contrary to the organization still existing in Bosnia-Herzegovina. Second, the entry into Kosovo had similarities with *deep* operations, both for its development immediately following an air campaign and the absence of a friendly component in the region, capable of supporting the initial phase of activities, such as

UNPROFOR in Bosnia and Albanian authorities in Albania. Third, in the first 30-40 days, there was no international organization in the AOR, capable of filling the power gap which followed the withdrawal of Yugoslav forces and of restoring the socio-political structure. NATO military commanders had to take decisions even beyond their sphere of action, being the only institutional authorities officially recognized. They took up the responsibility of managing inter-ethnic relations, rapprochement or mediation efforts and decisions governing cities and villages.

At the beginning of Operation *Joint Guardian*, the Garibaldi Brigade comprised about 1,700 men, combat support and combat service support units included, but given the complexity of the

operational situation in the region and the high number of tasks to be performed, the strength of the contingent had to be accordingly augmented. When the Bde reached its complete configuration on July 13, it comprised about 7,000 men of whom 5,500 were Italian. Also the Command of the multinational Bde North West, based on the Garibaldi Bde framework, took up the same configuration with the assignment of some important positions to Spain and Portugal (fig.7).

OPERATION ALLIED HARBOUR AND THE TAURINENSE BRIGADE

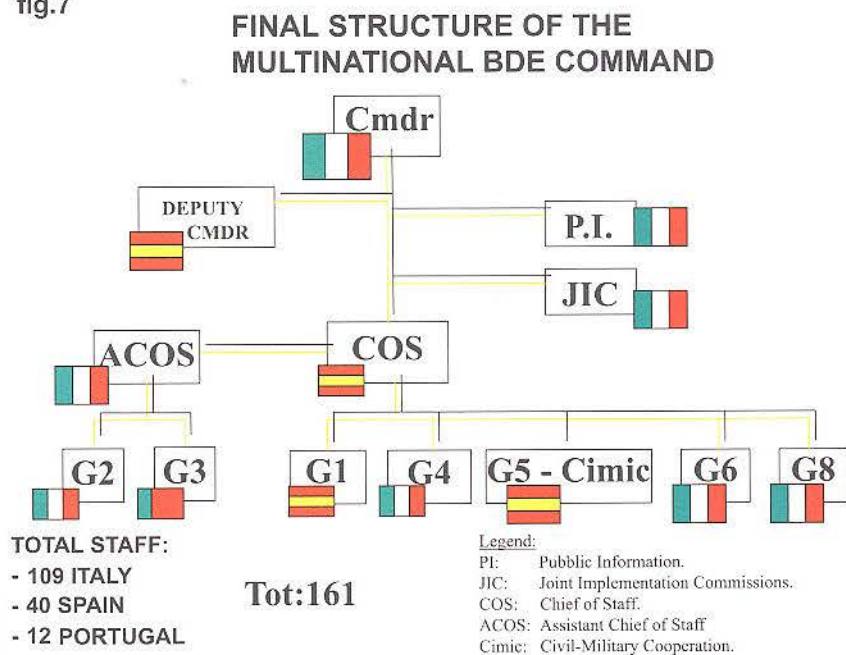
Allied Harbour: an allied harbour for refugees with the aim of providing humanitarian aid in

support of and in cooperation with the UNHCR¹⁸ and Albanian civil and military authorities. The operation was aimed both at alleviating the suffering of the Kosovar population who took refuge in Albania following the Serb offensive in Kosovo and at preventing the region from being destabilized.

On April 16, 1999, SACEUR gave the green light to *Allied Harbour*, transferring authority over all the forces already operating in Albania to Lt.Gen. John Reith, Commander of the AMF (L), who was designated Commander of the Albanian Force (AFOR). The AFOR HQs was successively deployed to PLEPA, near DURRES. The distressing conditions of refugees in Albania and the FYROM called for an emergency intervention immediately after air operations were started over the Yugoslav Federation, on March 24, 1999. The Alliance took on the responsibility of the problem and planned the humanitarian employment of forces in Albania.

On April, 7 a team under Maj. Gen. Pasqualino Verdecchia, AFSOUTH, contacted both Albanian Authorities and Governmental

fig.7



(GOS)/ Non Governmental Organizations (NGOs) already operating in the theatre. Four days later, an AMF(L) team under Lt. Gen. John Reith arrived in Tirana to prepare the deployment of his Command, carry out reconnaissance operations and hold meetings to coordinate the inflow of forces. The structure of

the NATO contingent was established during a *Force Generation Conference* held at SHAPE shortly afterwards. However, some elements of the peace force had already been deployed in Albania as members of NATO countries' national contingents (450 French, 200 German, 230 Greek, 830 American and 1,100 Italian troops).

The AMF(L) Command was projected to the theatre on April 14, 1999 to act as the AFOR HQ. On April 15, NATO announced that the ROEs for *Allied Harbour* had been approved by the North Atlantic Council and that earmarked forces amounted to 7,300 men.

The multinational contingent was divided into 5 *Task Groups*, one for each of the five lead nations: TF North (Italy), TF South (France), TF R (the Netherlands and Belgium), TF W (Spain), TF *Shining Hope* (United States). The mission was assigned the following tasks:

- setting up refugee camps (Fier-US: for 20,000 people; Elbasan-FR;



Ground-to-air Hawk Missile.

ALLIED HARBOUR: ITINERARIES, APODs and SPODs



fig.8

Korce-FR: for 9,000 people; Poiske-GR; Vlore-NL for 4,500 people; Rrashbull- EAU for 4,400 people; Dures-SP, Dures, Valona, Kukes-IT);

- restoring road network (fig.8), airports and landing strips (Kukes-IT; Tirana-US; Dures-NL);
- providing vehicles for the air and ground transportation of displaced persons (especially in emergency or medical evacuation situations);
- supporting the UNHCR in the transport and distribution of water, food supplies and other items.

The operation in Albania envisaged two phases. The first was carried out under national command following ad-hoc national directives. The second was under NATO OPCODE, in compliance with NATO HQ AFOR OPCODES. Operation *Allied*

Harbour was the first NATO-led humanitarian operation.

It was assigned the following national level mission: "committing the national contingent, progressively deployed to the theatre, to provide the maximum level of support to GOs and NGOs (mainly national) assisting Kosovo refugees, in cooperation with the Italian Delegation of Experts (DIE), the UNHCR and Albanian authorities, while guaranteeing security to the area".

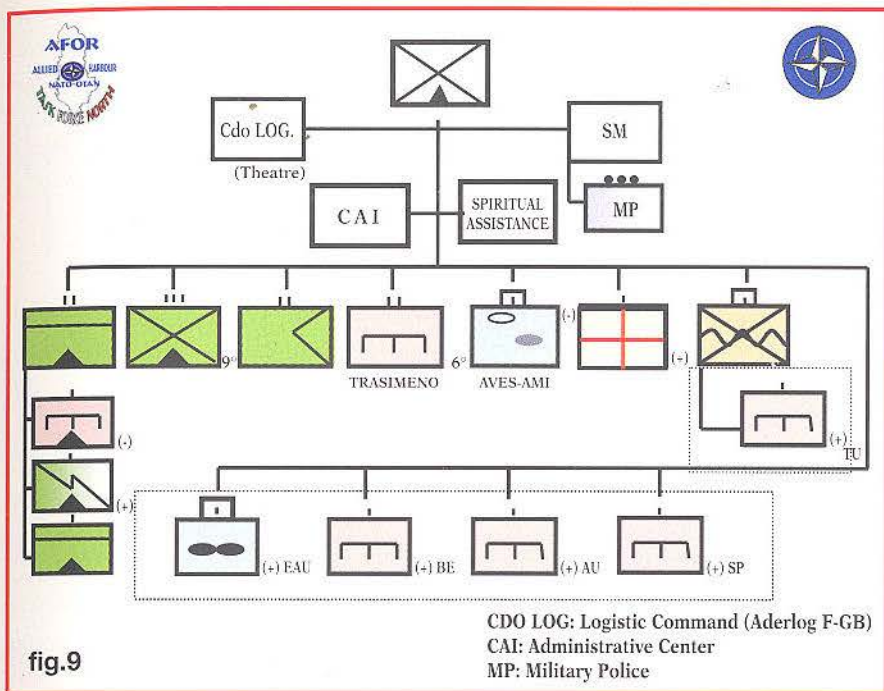
The NATO mission assigned to the Italian-led *Multinational Task Force North* (fig.9), following TOA to AFOR on April 28, 1999, envisaged following main tasks:

- to provide a temporary accommodation for refugees;
- to receive and support refugees, in cooperation with the UN High Commissioner for Refugees (UNHCR);

- to guarantee road-network maintenance and safety;
- to cooperate with the UNHCR in implementing refugee repatriation plan and people mine awareness campaign;
- to cooperate with the UNHCR in repairing and enhancing the trafficability of some important itineraries (*Main Supply Routes*), allowing for easy movement of AFOR forces transporting both material and personnel.

From July 1, 1999, in compliance with the guidelines set by the *Repatriation Plan*.

AFOR HQ established the following mission: "to assist the UNHCR and the Albanian government by guaranteeing support to planning, coordination, transport, medical and security operations, with the aim of ensuring a voluntary and controlled repatriation of refugees".



From September 1, 1999 The Taurinense Bde Command set up the Communications Zone West HQ (COMMZ W HQ), acting as NATO Command for the logistic support in Kosovo via Durres-Passo del Morini, as an alternative to COMMZ South via Salonika, FYROM. The phases of the operations carried out by the Taurinense Bde are shown in fig.10.

THE ARMY'S COMMITMENTS IN 1999

The Army made a huge effort in the Spring of 1999. Besides UN overseas missions, it had to contribute contingents on three fronts: in Bosnia, FYROM-Kosovo and Albania, plus the East Timor emergency in the second six-month period. The whole Italian Army was engaged in this action, both at central, local and combat force levels. The main features of the theatre, shown in fig.11, illustrate the complexity of the organization governing the inflow of forces and supplies through the APODs at Tirana (Albania), Salonika (Greece) and Skopje (FYROM) and the SPODS at Durres

(Albania) and Salonika (Greece).

In Spring three Bde Commands operated in the Balkans (Garibaldi, Taurinense and Ariete).

The fourth a/a artillery Regiment was deployed in Puglia. All units were put **under the OPCOM of the Joint Operational Command (COI)**. From the beginning of April, the Folgore Bde was engaged in Bosnia under the OPCON of the *Stabilization Force* (COMSFOR) Commander, through

the Multinational Division South-East (MNDSE) Commander. The Garibaldi Bde first operated in the FYROM and then in Kosovo, under the OPCON of the of the Kosovo Force (COMKFOR) Commander, with a HQ ARRC-based Command. The Taurinense Bde was initially deployed to Albania as a national contingent and then put under the OPCON of the Commander of the Albanian Force (COMAFOR), with a AMF(L)-based Command. The fourth a/a artillery Regiment was deployed along the Puglia coastline to defend sensitive points, under the OPCON of the *Combined Air Operation Center* (CAOC) at Poggio Renatico. The complex C2 structure set up for the operation in the Balkans (fig.12) gives an idea of the problems which had to be faced at several levels.

The Intermediate Operational Commands (FOP for the Folgore and Garibaldi Brigades, COMALP for the Taurinense Bde and COMSUPACA for the 4th a/a artillery regiment) were responsible for carrying out **the role of Mounting HQ** supervising forces' projection, rotation and coordination in the Theatre.

Close support was coordinated by three logistic Commands, each including an Agency called

fig.10

PHASES OF THE "TAURINENSE" BDE' OPERATIONS

1st PHASE	Preparation and organization	April 5 :AMF(L) at a 72 hrs. Notice to Move.
	Projection into the AOR and sub-phase under national command	Apr 8: Advance Party projection. April 18-20: Complete force deployment into the theatre. April 28.:TOA to AFOR.
2nd PHASE Operation <i>Allied Harbour</i>	Sub-phase under NATO Command (humanitarian aid)	
	Sub-phase under NATO Command (implementation of the Repatriation Plan)	July 11.: Implementation of the Repatriation Plan.
3rd PHASE Operation <i>Joint Guardian</i>	Trasformation into NATO Command (Communication Zone West HQ)	August 31.: Allied Harbour ends. Sept.1: TOA from AFOR to COMMZ W HQ (Joint Guardian).
	TOA to the Friuli Bde and Redeployment	TOA from "Taurinense" to "Friuli". Redeployment of the Taurinense Bde.
4th PHASE <i>Redeployment</i>		



ADERLOG, subdivided into Aderlog Forward, deployed in the Theatre and accommodating the Logistic Command of the national contingent operating in each AOR, and Aderlog Home Base (GB) located at the Magrone Barracks in Bari.

General Support was assigned to another Command, called **SOSTLOG**, located at the Magrone Barracks in Bari. A third Agency, called Coordination ADERLOG, was set up to interface between SOSTLOG and the three Aderlog Home Base (GB). Logistic resources were collected through SOSTLOG all over the national territory, in cooperation with the Logistic Inspectorate (ISPELOG).

To manage **administrative matters**, each Bde HQ was assigned an Administrative Center (CAI), hierarchically subordinated to the Commander and functionally

subordinated to the Special Administration Center (CAS) in Rome.

The Army's activities have highlighted five keys to success, which can be summarized in the equation M^3P . First: **Mobility** of Command Posts and Units, ready to be projected to the Theatre and to be operational at very short notice. Second: Modularity of the instrument, allowing for flexibility and cost-effectiveness. **Modularity** also implies the capability of adapting the C2 structure to the situation and mission by applying the concept of Task Organization. Third: **Multinationality**, a concept applied below Division level. In fact, both the Garibaldi and the Taurinense Brigades were set up as broad multinational formations. Fourth: **Joint Integration**, a key element for strategic transport and supplies. In our case, the

Taurinense Bde took up the role of Communications Zone West HQ (COMMZ W HQ), a NATO joint body. Fifth: **Interoperability** in the doctrinal, procedural and language sectors.

CONCLUSIONS AND FUTURE PERSPECTIVES

In 1999, NATO operations against the Yugoslav Republic were a military success. According to Professor Adam Roberts¹⁹, they had a record breaking value. In fact, for the first time in the 50-year history of the Alliance, a generalized military effort was made, military force was used to implement the UN Security Council Resolutions, though without an official Security Council authorization, and an air campaign was launched to stop the crimes against humanity

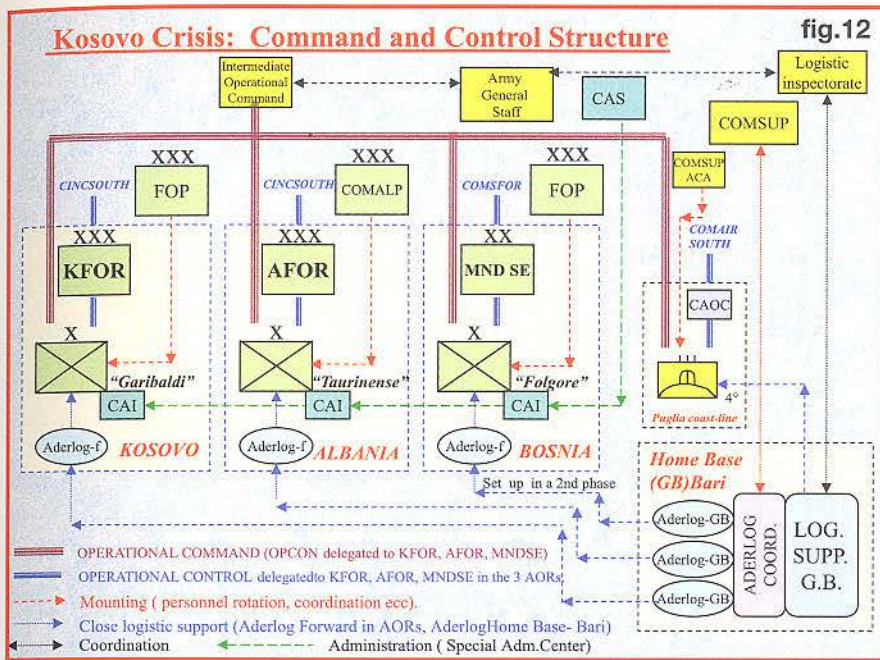


fig.12

Rights Charter regulations, which are becoming more important than national sovereignty principles. However, political matters in Kosovo are not apparently settled yet and the main issue at stake is the sovereignty concept itself. On the one hand, Kosovar Albanians want their independence, based on the principle of self-determination, on the other, Serbs insist in wanting Kosovo to be still part of the Yugoslav Federation, in the name of border inviolability and national sovereignty. Kosovo independence, which is Albanians' target, will inevitably be opposed by Russia and China at the UN Security Council decision-making forum, where both nations have a veto power. The Army's engagement in Kosovo and Bosnia will last over the short-middle term. Therefore other forces shall be earmarked and trained for possible crises occurring on the international

perpetrated by a nation within its borders.

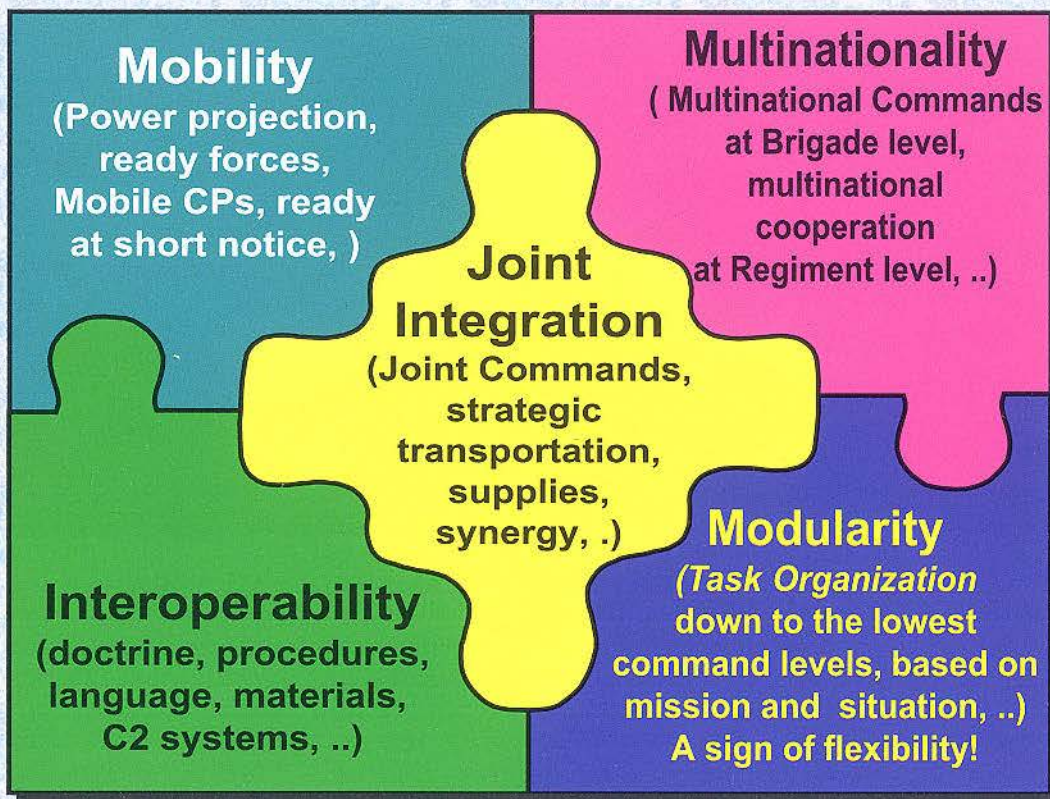
NATO leaders did not want to call it "war"²⁰ and created the term "humanitarian war", linking it to the

notion of "humanitarian interference".

This set a judicial record, providing for the employment of military force to defend International Law and the Human

Key Factors to the success of operations

fig.13



scenario, in line with the principle
of humanitarian interference.



** Colonel,
Chief, Conflit Analysis
Department, War College*

NOTES

(1) Battle Station, as regards a/a units, is the capability of engaging in real-time the targets assigned by the Agency which exercises tactical control.

(2) FYROM: Former Yugoslav Republic of Macedonia.

(3) Activation Order: Activation Order for NATO forces, which are put on a high state of alert, ready to intervene on order.

(4) KFOR: code-name for "Kosovo Force".

(5) ARRC: ACE (Allied Command Europe) Rapid Reaction Corps: The ACE Rapid Reaction Army Corps.

(6) The Extraction Force was tasked to "extract" the Verification Mission if the outcome of the mission degenerated or the situation worsened.

(7) The Combined Joint Task Force (CJTF) is the means through which NATO intends to operate beyond the scope of North Atlantic Council Article V (out-of-area missions).

(8) Joint Force Air Component Commander (JFACC), Joint Force Land Component Commanders (JFLCCs), and Joint Force Maritime Component Commander (JFMCC).

(9) COMARRC: ARRC Commander, acting as Land Component Commander in Kosovo.

(10) STANALFORMED: Standing Naval Forces Mediterranean. Multinational naval forces for the Mediterranean.

(11) COMMZ (W), established on September 1, 1999, exercised

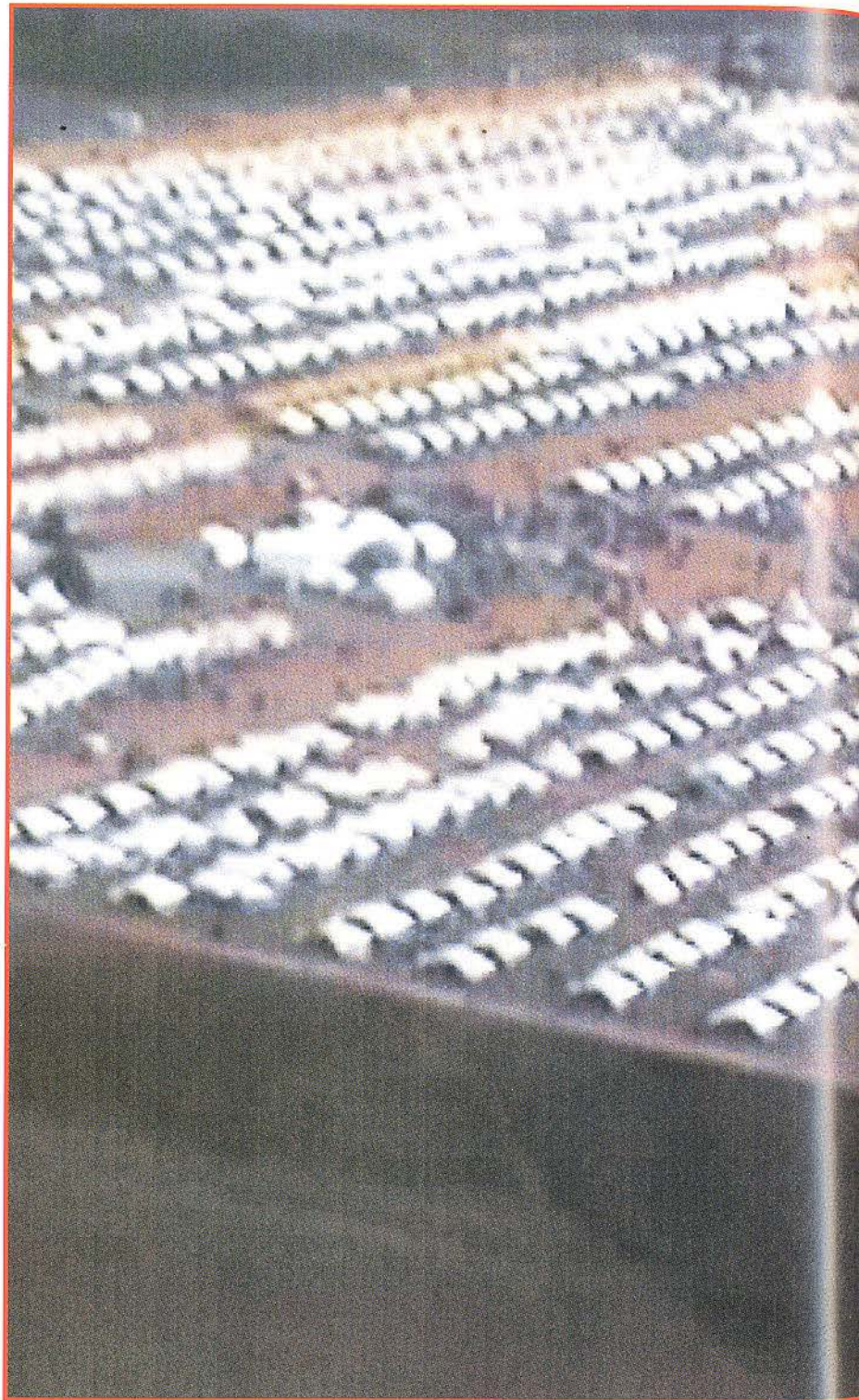
control over the Communications Zone West, via Albania.

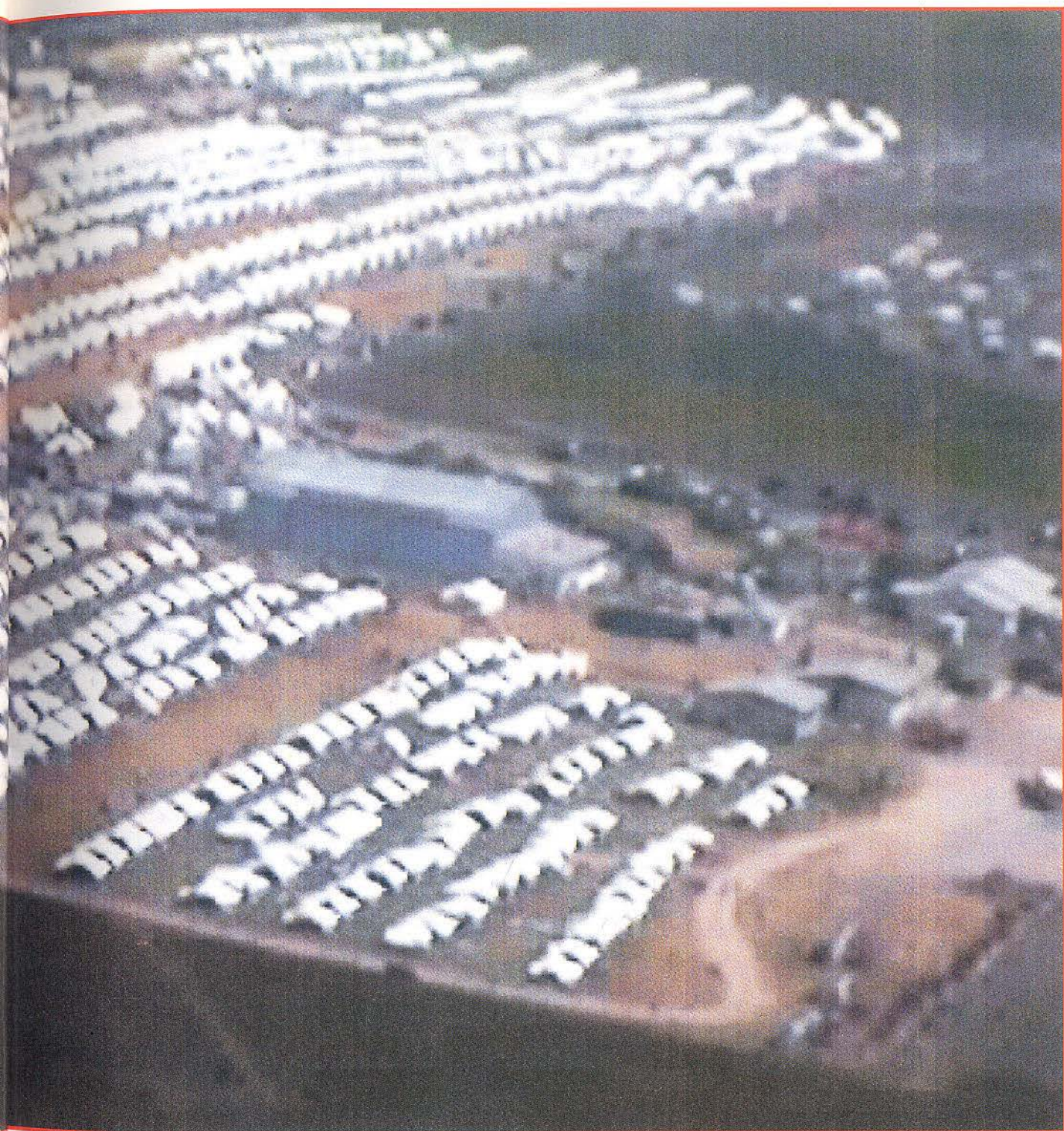
(12) The Supporting Commander supports the supported Commander. During Allied Force Operation COMAIR-SOUTH was the supported Commander; during Joint Guardian Operation COMKFOR was the supported Commander.

(13) IMINT: Imagery Intelligence: information drawn from aerial and satellite imagery.

(14) Aviano, Brindisi, Gioia del Colle, Istrana, Bari, Taranto, Piacenza, Ghedi, Cervia, Amendola, Pratica di Mare, Trapani, Grazzanise, Ancona.

(15) Thirty-five vessels were





deployed to the Adriatic, among which aircraft-carrier Roosevelt (USA) and Foch (France). More than 300 Tomahawk cruise missiles were embarked (possibly launched).

(16) The Air Operation Allied Force was initially divided into 5 phases, the last of which providing for a possible ground intervention as

part of a Peace Enforcing Operation.

(17) The Serb leadership was probably convinced that the air attack would not take place and, even in that case, would last a few days only.

(18) Four NATO aircraft were downed.

(19) UNHCR: United Nation

Commissioner for Refugees.

(20) NATO's Humanitarian War over Kosovo. Adam Roberts. Survival, Autumn 1999, pag.102.

(21) Mr Robinson, the UK Defence Secretary, said: "It is not a war" answering the question whether there would be an official declaration of war.

NUCLEAR ARMAMENTS

Concepts and Prejudice



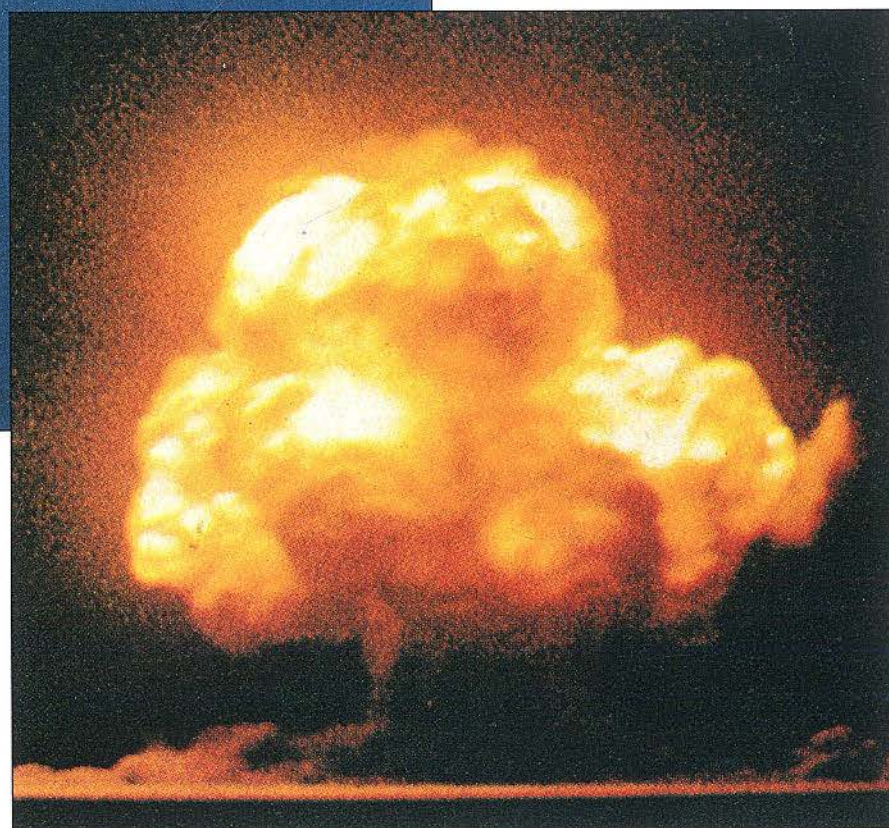
by Maurizio Coccia *

During the Cold War, the possession of nuclear weapons was an effective means of deterring the outbreak of conflicts. Paradoxically today, in a much changed world, nuclear weapons are a negotiating instrument used not only to overcome national unbalances but even to assume regional leadership. This explains their increasing proliferation and the subsequent need for Europe to react.



are to be thoroughly and equally preserved. Reaching an equal balance in the world is fundamental to prevent political interests from hindering the development towards a better future. It seems as though a wider general consent has already been reached, as shown, for example, by Italy's participation in peace-keeping actions and its preparation to join Europe. As already stated in similar articles, the world today is going through a fruitful period as national interests increasingly correspond to international ones, at least in the industrialised countries. The situation, however, is not as good in the field of nuclear armaments, their distribution and their possible reduction, decommissioning or ban. The immoral weapon, as described by India (which however has promptly taken possession of the weapon to the satisfaction of its public opinion) is turning out to be increasingly dangerous, as it threatens that necessary balance between national and international interests.

The end of a bipolar world, the collapse of Communism, the clear-cut victory of the Western model of democracy and free market and the promulgation of information are well-known current international issues, which the world has to continue to promote. However, international common sense and a general consent are necessary if both national and international interests





US THAAD system for the protection from ballistic missiles of US units abroad.

The atomic bomb, which was a revolutionary weapon compared to the weapons used until 1945, was mentally rejected due to the extent of the moral and physical damage it caused. Nevertheless, it did have some merits, particularly in improving relations between peoples. In fact, the atomic bomb anticipated the end of the Second World War; it turned out to be an effective political instrument in resolving crises such as the Cuban one and in avoiding the upsurge of new conflicts, preventing primarily the outbreak of an open war between the two blocs of a bipolar world. Those who held positions of authority and duty managed to

accept such a powerful weapon and the possibility that it would be unwisely used against other fellowmen. This meant that they had realised that the USA-USSR

confrontation had also become a nuclear one, which explains the sudden proliferation of warheads of varying power and with different tactical, strategic, political



Control room of the British HMS Vanguard, armed with 16 SLBM Trident II missiles.

and military tasks both at European and international level. At that time the future of the world was at stake and a choice had to be made between a communist or a democratic world. The nuclear confrontation was spreading in the world, but there were countries, such as the non-allied countries, which were against it. Those countries, however, did not constitute a threat to the world as they did not possess their own nuclear armament and if they did so, it was theoretically only for their own protection.

The reasons which led France and Great Britain to assuming their own nuclear power were neither understandable nor acceptable. They were not determined by bipolarism, but by Yalta and the foolish ambition of being on an equal footing with all the other leading countries and by the need for national security. This aspiration could then and can still today undermine international stability.

Generally, investment has borne its fruit. The possession and availability of nuclear weapons has allowed the USA, the USSR, France and Great Britain to strengthen their importance in international relations, strongly influence the process of international development as well as preserve their national interests. Other countries, notably China, India, Israel and Pakistan (just to name a few) have stealthily followed suit in building up their own nuclear armaments allegedly under the pressure of bipolarism and the need for regional stability. These events occurred during the bipolar years and the super powers were certainly aware of it, even if they did not approve of it. The increase in the number of countries possessing nuclear armaments has come about for political reasons, special bilateral relations, national pressure within the superpowers and all the other countries involved.

To reduce the danger of an

unchecked proliferation it was subsequently decided to deny access to nuclear armaments to any other country, thus creating an unproductive and uneven situation in international relations, which has continued to present day. The international balance of power has clearly been upset, and this could degenerate into new tensions and conflicts. International power today is

The launch of an ICBM Minuteman from its underground site.



unevenly distributed not only between nuclear and non-nuclear countries, but even between nuclear countries themselves. There are in fact countries, such as the USA, which have an outstanding nuclear capacity and the necessary technological know-how, while other countries have varying but meagre capacities. There are also countries that, due to the collapse of the Soviet Empire, have to put up with their own legacy and some of them are real nuclear powers as they satisfy the necessary requirements, that is they possess the necessary technical know-how, nuclear fuel and suitable missile carriers. Moreover, with the collapse of the Soviet Union, the purchase of nuclear material has become easier not only for individual countries but even for political groups. Chemical and biological armaments are also used as a substitute for nuclear armaments and they are owned by over twenty countries in the world today. The countries that have decided not to possess nuclear weapons or any other non-conventional weapon, are increasingly concerned about international solidarity and security, threatened by the selfishness of nuclear countries. The persistence of nuclear armaments, even when they are conceived as an instrument of defence, makes any effort aimed at strengthening international cooperation less credible and less effective. Despite the countries' good intentions, pessimism and distrust over international dialogue prevail and this attitude tends to downgrade cooperative countries such as Italy. The long process of nuclear armament reduction started up by the USA and the USSR has no longer a global meaning: it is a process that has been willingly undertaken only by two countries in a world where nuclear capacity is significantly widespread. That is probably why since 1992 the USA and the USSR and the



The US B1-B bomber can carry in its hold ALCM cruise missiles and a variety of bombs.

countries of the Warsaw Pact have not further reduced their nuclear armaments, despite the treaties that had been drawn up. On the international scene, each

individual country has probably a justifiable reason for keeping or building up its nuclear arsenal, but it must be borne in mind that those countries have also responsibilities towards the international community.

Nuclear possession for Russia, which collapsed mainly due to economic difficulties, is the only

means to revive its bygone leadership and maintain its relations with the USA and China. It is also a means to intimidate Europe, which has commercially-speaking "invaded" the country. The USA, on the other hand, considers the availability of a suitable nuclear arsenal, which can counteract any potential



nuclear threat, as essential to enhance its democratic leadership world-wide and protect everyone's fate. America's attitude can be better understood if a comparison is made between the annual speeches delivered by the President of the United States of America in May on national security strategy. The 1994 and

the 1997 speeches are hereafter compared. In the 1994 speech the US president explained that America's nuclear armament had to be maintained and used to preserve America's national interests. This was described as the national security strategy of engagement and enlargement. In 1994 the US was aware that it

had to guarantee international security, if it wished to safeguard its own national interests. At that time, national security was at stake and thus that speech was addressed to the American people. In 1997 international leadership was fundamental to guarantee a coordination between the industrialised countries which



French nuclear-propelled submarine "Le Triomphant", SSBN class.

were increasingly threatened by international instability. That year the speech was therefore addressed to the whole world. Nuclear power had become an instrument for the protection of international, as well as national, security.

In the field of nuclear possession, the US leadership had some limitations. Initially, the USA had a monopoly over nuclear armament, but then it allowed other countries (notably its former allied countries during the Second World War) to take possession of the same instrument, paving the way for future proliferation. Israel and Pakistan for example have built up their own arsenal, causing many

US IRBM Pershing II missile during its launch from a European base.



problems and leading neighbouring and antagonist countries to do the same. India, Iran, Iraq, Brazil and South Africa are just a few examples.

France has built up its own nuclear armament to develop an independent dialogue with the USA. Today, despite its commitment to the European Union, it continues to follow a resolute policy to assume European leadership. France's leadership would be the alternative to the American one and its power would be based on the availability of nuclear armaments.

The situation is different for Great Britain. In the past Great Britain was a country open to the world, owing to its naval supremacy. It developed strong transatlantic relations and was proud of having a different fate from all the other European countries. However this is no longer the case today as Great Britain is increasingly closer to Europe than to its former colonies.

To summarise, the situation in Europe is as follows. A series of countries are guided by one single nation, the United States, which deals with foreign policy and security. France wishes to take on European leadership, but as it cannot do so on its own, it is trying to form an alliance with a strong European economy, that is Germany. The United Kingdom is the supervisor. The remaining countries, instead of opposing the leading countries, side with one or the other according to their national interests.

The issue of the possession of nuclear armaments has clearly and profoundly exacerbated this situation. The source of all the problems is the redefinition of European and American relations and the concept of leadership in today's international relations. If the US wishes to be the leading country, Europe has to politically join the US, so as to create a balanced European and American system. A collective commitment would have



US B52 bomber with all the armament it can carry, such as ALCM cruise missiles.

to be undertaken to overcome international unbalances and to spread the democratic model in a peaceful world. Joint European and American cooperation would be essential to promote peace, progress and wealth.

If the US, on the other hand, intends to be an equal partner with Europe, a solid Europe has to be built to overcome, as previously mentioned, international unbalances and spread the democratic model. If isolationism prevailed, a long, defensive and uneven war would break out to safeguard and protect the living standards achieved in richer countries against any attack made by poorer countries. This would bring us back to a Medieval, although technologically developed world. In any case, European and American cooperation would

always be, just like Nato, a favourable and irreversible reality, which in future will hopefully be based on more effective and less incidental measures. The non proliferation treaty is thought to be unfairly discriminating: joint and peaceful initiatives and declarations have increased, but selfish attitudes have developed too. The global village is bigger and more open and everyone is trying to take advantage of it. In today's world initiatives are multiplying, globalisation is consolidating, political, diplomatic and military commitments for the development of democracy and the improvement of the quality of life are growing, but at the same time the number of countries possessing "the bomb" is increasing.....just in case. The countries that do not possess it, either borrow it from other countries or try to buy it.

Nuclear weapons will lose their value only if something worse is invented or they might

be abolished if a timely, energetic and cohesive awareness campaign, similar to the one on smoking, is launched. However, cohesion cannot be credible if there is no effective monitoring.

If nuclear armaments are reduced without levelling out international differences and redefining international roles, the "nuclear risk" will decrease, but the nuclear threat will remain.

As long as nuclear weapons exist, there will always be the temptation of using them, which has luckily not occurred yet. Only the end of the nuclear threat can pave the way for a more credible and a more beneficial global cooperation, which is crucial for the development of a better future and more mutually beneficial international relations.

□

** Major General (ret.)*



*Interview with
the Chief of the Romanian
Army General Staff
Major General
Mihail Popescu*

by Enrico Magnani *



ROMANIA

THE NEW ARMY

ROMANIA IS A WEU ASSOCIATED PARTNER AND IS MAKING A GREAT EFFORT TO REORGANISE ITS ARMED FORCES.

IT IS AIMING AT AN ARMY COMPLYING WITH EUROATLANTIC PROCEDURES AND OPERATIONAL STANDARDS.

Would you tell our readers the changes the Romanian Army will face from the organisational and operational point of view in the near future?

One of Romania's major goals is to integrate itself into the Euro-Atlantic security organisations and preserve its national interests. In this respect the integration of Romania into NATO is of basic importance. Romanian army is therefore being deeply and widely reorganised in order to have it combat-ready and NATO-oriented within the shortest time.

In the meanwhile we do not want to lose our people's trust. More than 80 per cent of the population rely on us and we make our best for them.

The army accounts for 65 per cent of the Armed Forces and is being re-organised in order to dispose of:

- an inter-branch-modular organisation

(which means that artillery, engineer, NBC, etc. will be modular as to personnel, reconnaissance, operations, logistics, international and civil-military cooperation, telecommunications, training, planning, etc.).

- an operational force based on combat-ready brigades, including 4 mechanised, 1 armoured, 1 mountain, 1 air-mobile, 1 artillery, 1 air-defence artillery and 2 logistics. All or part of them will be committed to an operational two-division Army-Corps Command during crises. This structure will also include a 48-to-72-hour-ready Rapid Reaction Force.
- a reserve force made up of 3 or 4 territorial army corps, including mountain, armoured, artillery, air-defence artillery, and logistics territorial brigades. They will be operational on call.
- surveillance and early warning





Soldiers from the 812th infantry battalion.

forces made up of all kinds of action-ready reconnaissance units.

- a new and modern training system.
- a new operational doctrine for facing the latest challenges.
- new training and evaluation standards.
- an improved equipment as a result also of cooperation with industry on a license-based agreements.

These are the issues at stake

included into a two-step programme which first (2003) aims at reorganising and then (2007-2010) at improving our equipment.

The Romanian army has been working hard to comply with NATO standards. Would you tell us about the major steps and the greatest efforts?

We made important steps to reorganise and set clear tasks for a 62,000-man Army. Doctrine was

revised and staff included into an inter-branch modular system which relies on interconnected training and education centres.

Many people are taking part in this process which is of basic importance to the modernisation of Romanian Army.

Generally it is believed that thanks to PfP Eastern and Western European Armed Forces will interface. Is it true?

Yes, it is right. PfP put an end to isolation and helped us realised that we are competitive. New training and procedures have been implemented and in this respect we understood that professionals are better than conscripts.

There is a widespread tendency in Europe to increase professionals and reduce conscripts. What is your trend?

Traditions cannot be left aside. In Romania when you have not served in the military you will hardly merry or make business or run for politics.

Obviously we prefer professionals although it depends on the units: 7 out of 10 for operational units and 3 out of 10 within territorial units.

As far as we know there is female recruitment in Romania, especially for technical and logistical units. How are they doing and what other tasks will they be given in the future?

This is not correct. There are a few women in the Army but there is no female recruitment. Constitutionally women have no military obligations but we know that when they have the desire to

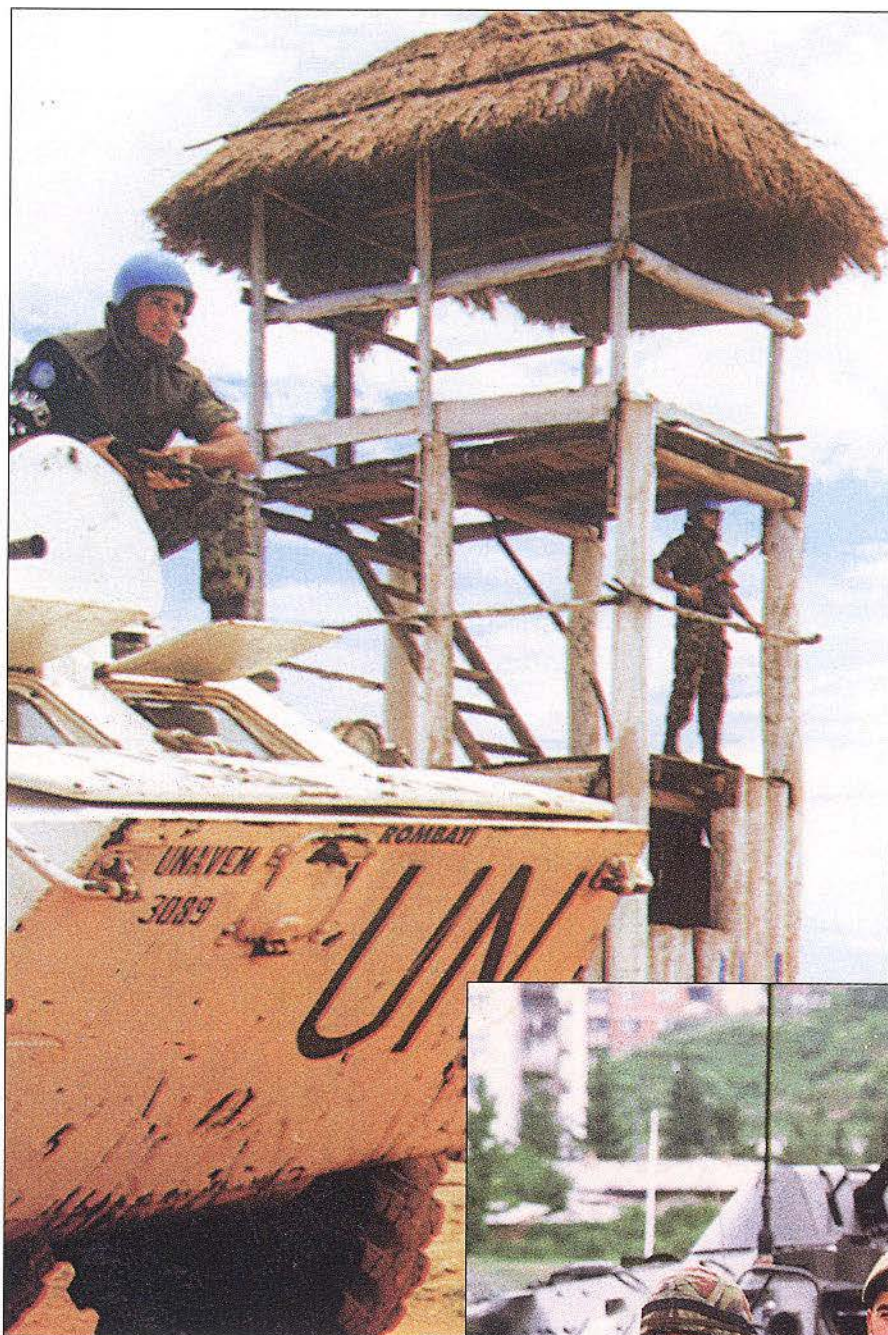


In 1994 also the Romanian Army took part in the UNOSOM II mission in Somalia.

serve the Country, this cannot be denied to them: 50 per cent of the population is female and they can be an added value to the armed forces. Not only can they work in logistics and technical units but also where no special physical strength is required. Evidently women's virtues perfectly fit into the military hierarchical organisation and they can make a lot for it in terms of organisation and patriotism. For the time being there is no particular requirement to be met. So when it is asked



Bosnia, the North Doboj Bridge built by Romanian engineers.



Angola, Romanian soldiers on surveillance duty in Angola.

former Yugoslavia, Angola, Kuwait. Were there lessons learned from this international experience?

In our Army there are 4 Battalions oriented to international operations and all of them have taken part in the aforesaid missions successfully. From their experiences we learned that changes were necessary as to doctrine, organisation, training, command, control, equipment, logistics, etc.

Romania joined the Western European union as an associated partner. What does it mean? Is the Romanian Army going to take part in the multinational exercises led by the Western European Union?

Usually Armies are assigned their

female recruitment will be implemented as soon as possible.

During the last years Romanian troops have taken part in several Peace Support operations under the umbrella of international organisations: Albania, the

Sarajevo, Romanian and British soldiers on duty at the Zetra Stadium during the general election in 1996.



Romanian Officers and General Forlani, Commander of Operation "Alba".

tasks by governments. That is also in Romania and we do our best to meet the requirements set by politicians. Romania is a constitutional state and there is no doubt that the Army is only a part of it which belongs to political decisions.

I would like to thank "Rivista Militare" for giving me this opportunity which I hope to have again in the future in order to talk more about the common future of our armed forces.



** Journalist*



Major General Mihail Eugeniu Popescu was born on April 1, 1948.

He attended the Military Accademy where he became leader of the Artillery course. Promoted to First Lieutenant in 1969, he was on regimental duty and served at the Artillery Training Centre. As a captain, he was battery Commander and deputy Battalion-Commander. With the rank of Colonel, he commanded the 135th Artillery Regiment and attended the Academy for High Military Studies, the postgraduate Staff Course, the National Defence College and, as a General, the NATO Defence College in Rome. Gen. Popescu was Artillery Commander of the 81st Mechanized Division and of the 4th Army (Transylvania), Artillery Inspector and Director of the "Doctrine and Training Department" of the Defence General Staff.

Gen. Popescu has been Chief of Staff since 1997.

He is a graduate in military science and was awarded several medals and Orders of Merit.

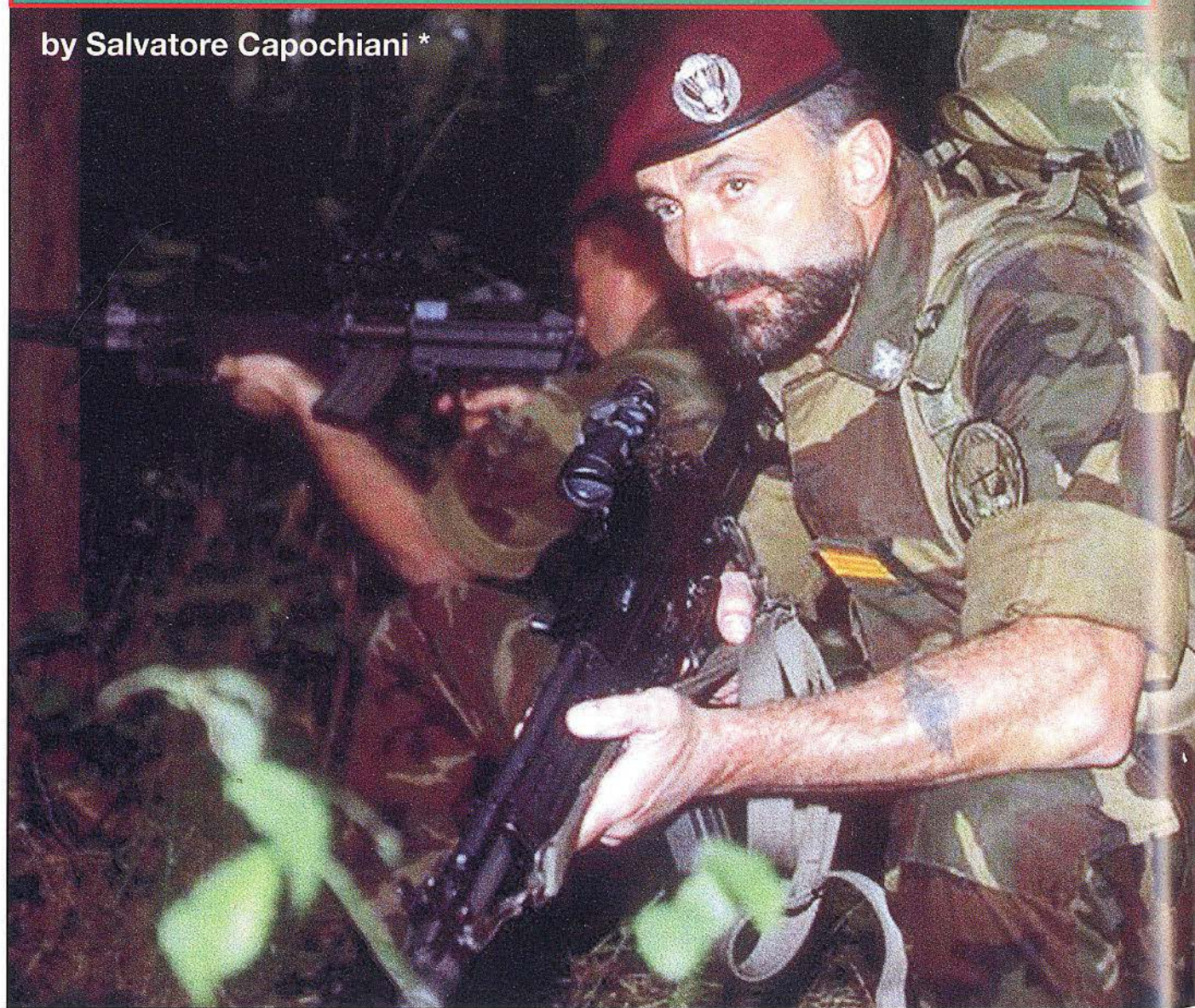
Major General Eugeniu Popescu is married and has a daughter.

EAST TIMOR

In a remote corner of the world, in a small and neglected tropical region, a terrible tragedy of violence and massacres has been perpetrated for twenty-three years. A people who hoped to shape its own fate has been brought to its knees by a devastating ethnic and religious conflict.

The UN INTERFET mission, in which Italy is taking part, is arduously trying to re-establish the law and restore peace in the area.

by Salvatore Capochiani *



THE ITALIANS IN THE GHOST ISLAND



A confused and frightened message broadcasted by an Australian radio amateur on 7th June 1975 seems to re-echo a quarter of a century later: "Women and children are being shot at on the streets. They will kill us! Please help us, please!". That message came from the former Portuguese colony of East Timor, 700 km north of Australia. It had been invaded by Indonesian marines and parachutists shortly before dawn.

At the beginning of September 1999 that plea resounded all over the world. A few hours after the announcement that the great majority of the population of East Timor had voted for its independence from Indonesia, the Indonesian militia - trained and supported by Indonesian armed forces - transformed that tiny half of the island into hell. Churches and other shelters were attacked, killing hundreds of advocates of the island's autonomy. About 200,000 East-Timorians (on a total population of 850,000 inhabitants) escaped or were forced to leave their homes. Armed groups sacked the capital, Dili, while the killings continued. The outbreak of violence compelled foreign journalists to leave the island and the UNAMET (United Nations Assistance Mission in Timor), which had organised the referendum of 30th August, was scaled down in size with only eighty-four representatives left on the spot. The UN in New York received terrifying messages from

Dili for a whole week. According to a UN diplomat: "Many of the UNAMET representatives were in Bosnia, Sierra Leone and Liberia, but allegedly what is happening over there is even worse!".

Indonesia, East Timor and Dili are thousands of kilometres away from the western world, they are unknown to many and can only be reached with 16-hour flights. Where is exactly this archipelago that covers 1,949,000 sq km and has a population of 205 million inhabitants? Why has East Timor recently been struck by violent conflicts, which have destabilised the government in Jakarta and tarnished the country's reputation? Why has the UN Security Council unanimously decided to send an international intervention force in the area without knowing exactly how the situation would evolve?

THE INDONESIAN ARCHIPELAGO

The Indonesian Archipelago, better known as Insulindia, is formed by a chain of tropical islands inhabited by different peoples with different cultures, problems, perspectives and aspirations: it is an unrivalled universe in Southeast Asia. Up until 1945 Indonesia was known as the Dutch Islands and was geographically and administratively divided into two areas: the larger islands of Sumatra and Java on the one hand and the smaller islands on the other, referred to as

external possessions. After gaining independence from The Netherlands, the Indonesian government military took over the Dutch colonies of the Moluccas and Western New Guinea and the Portuguese colony of East Timor. Thus, the dream of many Javanese *élites* of creating a "Large Indonesia" had become a reality. However, from a Western point of view, that reality does not correspond to the aspirations of the various peoples living in the area, who have different cultures, languages and religions and do not share the same history.

ITS GEOGRAPHY

Indonesia is situated between the 7th boreal parallel and the 10th austral parallel: it is the largest archipelago in the world. It is 5,000 km long, from east to west, and 2,000 km wide, from north to south. It comprises five larger islands and about 13,700 smaller islands. Four of the larger islands, that is Sumatra, Java, Borneo and Sulawesi (Celebes) form the Large Sunda Islands. Bali and all the other islands to the east (Lombok, Sumbawa, Flores, Sumba, Timor, etc., which make up the Nusa Tenggara, that is the "Southeast Islands") form the Small Sunda Islands. The Moluccas and Irian Jaya (the western part of New Guinea) too belong to the Indonesian archipelago. They are attached to the Sahul continental shelf, which is an extension of the Australian continent. The Sunda Islands, on the other hand, (with the exception of the Nusa Tenggara) are attached to the Asian continental shelf.

In 1854 the British naturalist Alfred Wallace classified the Indonesian islands into Western Asian and Eastern Australian islands. The Wallace Line divides the two regions and runs between Borneo/Kalimantan and Sulawesi to the north and between Bali and Lombok to the south. Once upon a

time the islands to the west of the Wallace Line, that is Sumatra, Java, Kalimantan and Bali were attached to the Asian continent and that is why elephants, tigers, rhinos and leopards still survive in some areas. The most popular animal is the orang-utan ("the man of the forest" in Indonesian) which lives in Sumatra and Kalimantan. The islands to the east of the Wallace Line, that is Sulawesi, Nusa Tenggara and the Moluccas have been islands for such a long time they have developed their own flora and fauna. In Nusa Tenggara there are the typical plants and animals that live in arid areas. There are no large mammals, but mammals are generally smaller. There is an interesting and very popular animal, the Komodo dragon, which is the largest lizard in the world.

The Indonesian Archipelago constitutes a barrier between the Indian and the Pacific Oceans. However, the Sunda Strait provides a link between the two oceans and most importantly between the Asian continent and Australia.

HISTORY

According to palaeo-anthropologists, the first Indonesian inhabitant was the so-called "Pithecanthropus erectus" or "Man of Java", who emigrated to Java by land at least five hundred thousand years ago. Indonesians originally come from the Malay Archipelago and in fact they are very similar to Malaysians and the Filipinos. They first emigrated from South China and the Malay Peninsula around 4,000 B.C..

HINDUISM AND BUDDHISM

Hinduism and Buddhism were brought to Indonesia from India in the IV century A.D. through trade. Small trading centres developed into powerful reigns in Java and Sumatra. The Buddhist reign of the Sriwijaya dynasty ruled in the

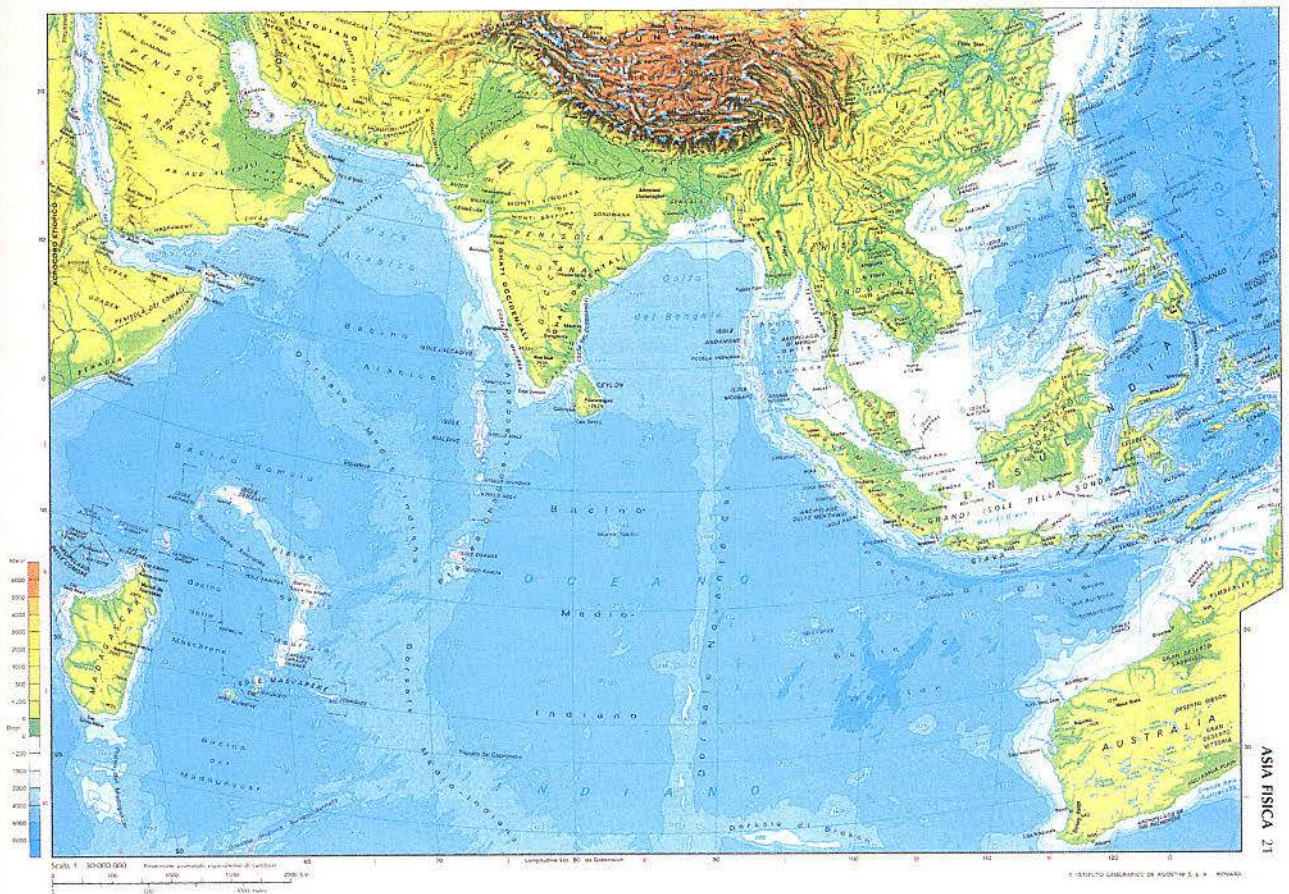
south of Sumatra and part of the Malay Peninsula for six centuries, while the Hindu empire of the Mataram dynasty reigned in inland Java. The Mataram dynasty is known for the imposing Borobudur temple it erected in Java. However, the dynasty mysteriously collapsed and was replaced by the last Hindu dynasty, the Majapahit which reigned in Java, Bali and other areas of the archipelago from the XIII to the XV century.

ISLAM

The spreading of Islam marked the fall of the Majapahit dynasty - which continued to rule only in Bali where it developed a thriving Hindu culture (which is still evident today) - and the springing up of various sultanates in Java. At the beginning of the XV century a strong Muslim empire developed on the Malay peninsula, in Malacca. In 1511 however, the Portuguese took over the area paving the way for a long period of European presence both in the Malay and the Indonesian Archipelagos.

COLONIALISM

The Dutch replaced the Portuguese at the beginning of the XVII century. In 1641, after its first unsuccessful attempt in 1619, Britain finally conquered Malacca. Thanks to its naval supremacy, it controlled trading routes and ports and ruled the area throughout the XVIII century. During the Napoleonic wars Britain temporarily governed the area. Between 1811 and 1816 France occupied The Netherlands and Java was under the famous Sir Stamford Raffles. At the end of the Napoleonic wars, an agreement was struck between Britain and The Netherlands: Britain would hand over its Indonesian possessions to The



Netherlands in exchange for India and the Malay Peninsula.

For five years from 1825 the Dutch had to suppress several revolts in Indonesia headed by the Javanese prince Diponegoro. It was only towards the beginning of the XX century that the Dutch managed to conquer and rule the whole archipelago, including the provinces of Aceh (north of Sumatra) and Bali (east of Java).

INDEPENDENCE

Despite the fair ruling applied by the Dutch, the Indonesians were dissatisfied. A strong nationalist movement led by Achmad Sukarno was formed, which the Dutch obviously tried to quench. During the Second World War Indonesia was invaded by Japan, which was however defeated. On 17th August 1945 Sukarno proclaimed Indonesia's independence. The

Dutch attempted once again to assume control of their former possessions, but the Indonesians fought a bloody war for four long years until 1949. In the end the Dutch had to recognise the country's independence.

The path to independence was not an easy one. During the first ten years, politicians jostled for power. This situation was put to an end in 1957 by Sukarno's decision to apply the principle of a "Guided Democracy" supported by the armed forces. Sukarno took up full powers.

Sukarno was a capable revolutionary leader, but he was not a good governor for the country. The great building projects and the ongoing confrontation with Malaysia led to the gradual deterioration of the country's economy. In the meantime a coup d'état was attempted by one of Sukarno's duty officers. The attempt was thwarted by the army

guided by general Suharto. The reasons for the coup d'état are still unknown, but at the time it was believed it had been made by the communists. Subsequently, hundreds of thousands of communists, either suspects or sympathisers, were killed or imprisoned. This led to Sukarno's dismissal from office and Suharto became president of the Republic.

THE FIRST CRISIS IN EAST TIMOR

The first crisis in Timor broke out under Suharto's presidency. Timor is the farthest island of the Nusa Tenggara. It is one of the most traditional Indonesian islands, although it is not very popular with western tourists. It is a large mountainous and arid island which hosts different cultures. Christianity is practised by the majority of the population,

but animism is also very common. Timor has never been in close contact with the national Indonesian culture. The island is divided into West Timor (47,000 sq km, capital: Kupang) and East Timor (15,000 sq km, capital: Dili).

The Portuguese were the first to set foot in Timor at the beginning of the XVI century. The Dutch followed and seized Kupang in the mid-XVII century. After a long battle, in the mid-XVIII century the Portuguese moved to the eastern part of the island. In 1949, when Indonesia became independent, West Timor was incorporated into the new Republic, while East Timor continued to be under Portuguese rule. The 1974 coup d'état in Portugal led the Portuguese government to surrendering its colonies. East Timor obtained its independence and soon after three political parties were formed. In August 1975 a bitter conflict arose between two of the political parties: the Timor Democratic

Union (UDT) and the left-wing Fretilin party. Indonesia was against an independent East Timor and the Fretilin party was seen as a communist threat. On 7th December 1975, Indonesia invaded the former Portuguese colony, presumably with the go-ahead of the then US Secretary of State Henry Kissinger, who had just paid an official visit to Jakarta. Allegedly the Indonesians were ruthless. Many Timorians died due to food shortages and lack of medicines. In 1989 Indonesia gained control over East Timor and the island was opened to tourism. Nevertheless, in November 1991, the Indonesian army resorted again to violence to silence a protest at the Dili cemetery. The world was once again concerned.

INDONESIA IN THE 1980s AND 1990s

Corruption and favouritism did

not prevent the rapid development of the Indonesian economy in the 1980s and at the beginning of the 1990s owing to substantial foreign investments and the process of industrialisation. However, the 1997 Asian economic crisis brought about the devaluation of the rupiah and the subsequent collapse of the Indonesian economy. Perspectives were gloomy and so the IMF (International Monetary Fund) had to allocate a \$41-billion aid. Indonesia's distress over Suharto's corrupted and nepotistic regime grew particularly towards the end of the 1990s. The economic crisis gave rise to a wave of demonstrations asking for new political reforms and Suharto's resignation. The revolts were badly handled by general Wiranto and his armed forces: over a thousand protesters were killed in May 1998. Suharto finally resigned on 21st May 1998. He was succeeded by deputy president B.J. Habibie, who was Suharto's close friend and was





Italian Paratroopers leaving for the peace mission in East Timor.

Facing page.

The outbreak of violence in East Timor has compelled the intervention of peace mission soldiers.

not therefore very popular. However, Habibie soon showed that his policy would have been different: several political prisoners were released (some of them came from East Timor), the local and foreign media were liberalised and a law was passed banning any discrimination against Chinese people (the Chinese were amongst the targets of the 1998 revolts). The country's economy too recovered: an independent central bank was established, a strict monetary policy was adopted and greater transparency on the government's public spending was guaranteed.

Furthermore, president Habibie declared that by 1999 regular elections and a referendum would be held in East Timor to vote for its autonomy or its independence.

INDONESIA IN 1999

President Habibie kept his promises. However, a series of political and at times even violent and bloody events showed that Indonesians wanted a fully democratic country. On 7th June free elections were held for the first time after forty-four years. The Indonesia Democracy Party (PDI) headed by Megawati Sukarnoputri - the daughter of the late president Sukarno -, who intended to set up an honest and trustworthy government, won the elections by 34%. It defeated the ruling party, the Sebker Golkar (a joint secretariat based on functional groups), which was supported by

the military. Sukarnoputri was clearly entitled to become President of the Republic.

From August to October Indonesia was struck by a wave of violence. Many were killed in Ambon (eastern Moluccas) in a battle between Christians and Muslims: a similar battle had been fought the previous year. Killings and kidnappings were also perpetrated in the province of Aceh where Muslim rebels were no longer satisfied with their religious, cultural and educational autonomy and claimed the province's independence. Muslim students protested in Jakarta asking for the resignation of the Defence Minister, general Wiranto. Anti-governmental demonstrations were also organised in October to protest against the prosecution's decision to drop corruption charges against Suharto and his family. The Suharto family had been charged with embezzlement

during Suharto's presidency: \$15 billion of public spending had been allegedly deposited in Switzerland.

Towards the end of October the new National Assembly, made up of 700 members and delegates, elected Abdurrahman Wahid as President of the Republic. He is a witty 59-year-old Javanese who belongs to a noble Muslim family. He studied in Baghdad and El Cairo, he is a journalist and a scholar, he knows English and Arabic and is fond of Western literature and classical music. He has always been hostile to religious extremism and supports Christian and Chinese minorities in Indonesia. He has also proposed to promote diplomatic relations with Israel, but Islamic groups do not agree because they believe that president Wahid does not uphold Islamic law.

The new president managed to work out a compromise. The day after his election, he appointed Sukarnoputri as deputy president. Despite the PDI's victory at the general elections in June, Sukarnoputri had not managed to forge an alliance with the minor moderate parties, mainly because the election of a female president was strongly rejected by the Muslim front. At the end of

October, President Wahid formed a new government which reflected the religious and cultural variety of the country and the "coalition of the 11th hour" which elected him president. The thirty-four appointed members were chosen from the seven major political parties and the military; the five main Indonesian religions were all well represented. The Ministry for Foreign Affairs was entrusted to a former Indonesian lecturer at Harvard University, USA, and the Defence Ministry (which had been headed by the military for forty years) was entrusted to the former Minister of Education. General Wiranto, already Defence Minister and Commander in Chief of the Armed Forces, was appointed Minister for Political Affairs and Security. Moreover, president Wahid abolished the Ministry of Information and formed the new Ministry for Human Rights.

Paradoxically, however, the ethnic cleansing, the killings and the pillages perpetrated in the major cities and the massacres in East Timor did not spark off a civil war in Indonesia. Someone had even foresaw "another Yugoslavia". On the contrary, at the end of October, Indonesia had developed from a military

dictatorship into the third international democracy (after India and the United States).

THE INTERNATIONAL INTERVENTION FORCE

In the meantime East Timor, which had unwillingly depended on Indonesia for twenty-four years, was waiting for the National Assembly's official approval of its right to secession. The referendum results, which had been scrutinised by UN officials, showed that 99% of voters took part in the referendum of the 30th August and 78.51% of them refused Jakarta's proposal of autonomy and chose independence. President Habibie and general Wiranto committed themselves to respecting the voter's choice. However, pro-Indonesian militia groups had started attacking East Timor even before the official results were revealed. They brutally attacked the population, the clergy, UN officials and journalists. President Habibie and general Wiranto did not manage to peacefully counteract the militias' offensive and a military intervention could have aroused the resentment of Indonesian officers who had already fought in the area. The government support transformed the militias into a powerful military force. Similar groups had been formed in Jakarta in the 1950s and 1960s to counter radical Muslims and communists and in 1998 to counter students who protested and caused the collapse of Suharto's regime. The number of these groups increased in East Timor (from 1,200 to 20,000) when president Habibie declared, at the beginning of 1999, that East Timor would be given the opportunity to choose between autonomy and independence. Despite continued intimidation, the referendum was held and groups, such as the Besi Merah Putih (Red and White Steel, the





Left and above.

The waves of violence and massacres in East Timor have forced East Timorese to flee their homes and their land.

colours of the Indonesian flag) and the Aitarak (Thorn) started attacking UN officials and the advocates of independence. The international community promptly undertook a supportive action. Australia took up the leadership of a UN intervention force, which Italy immediately joined, and formed a large logistic base equipped with a port and airport in Darwin (on the Northern Territory coast and 700 km south of Timor). Great Britain, France, New Zealand, Italy and Portugal provided ships and air-crafts and a total of 7,500 men. Thailand, the Philippines and Malaysia gave their contribution too. With Jakarta's hesitant approval, the UN Security Council with resolution number 1264 authorised the intervention of the international force. The first INTERFET

(International Force for East Timor) unit landed in East Timor on 20th September. The commander in chief was the Australian Major-general Peter Cosgrove and the second-in-command was the Thai Major-general Songkitti Jagabatra. British Gurkhas too took part in the mission. As the INTERFET was predominantly a Western mission in a Southeast Asian country, Kuala Lumpur contributed with a limited contingent. The Asian countries on the whole provided for only 20% of the international force.

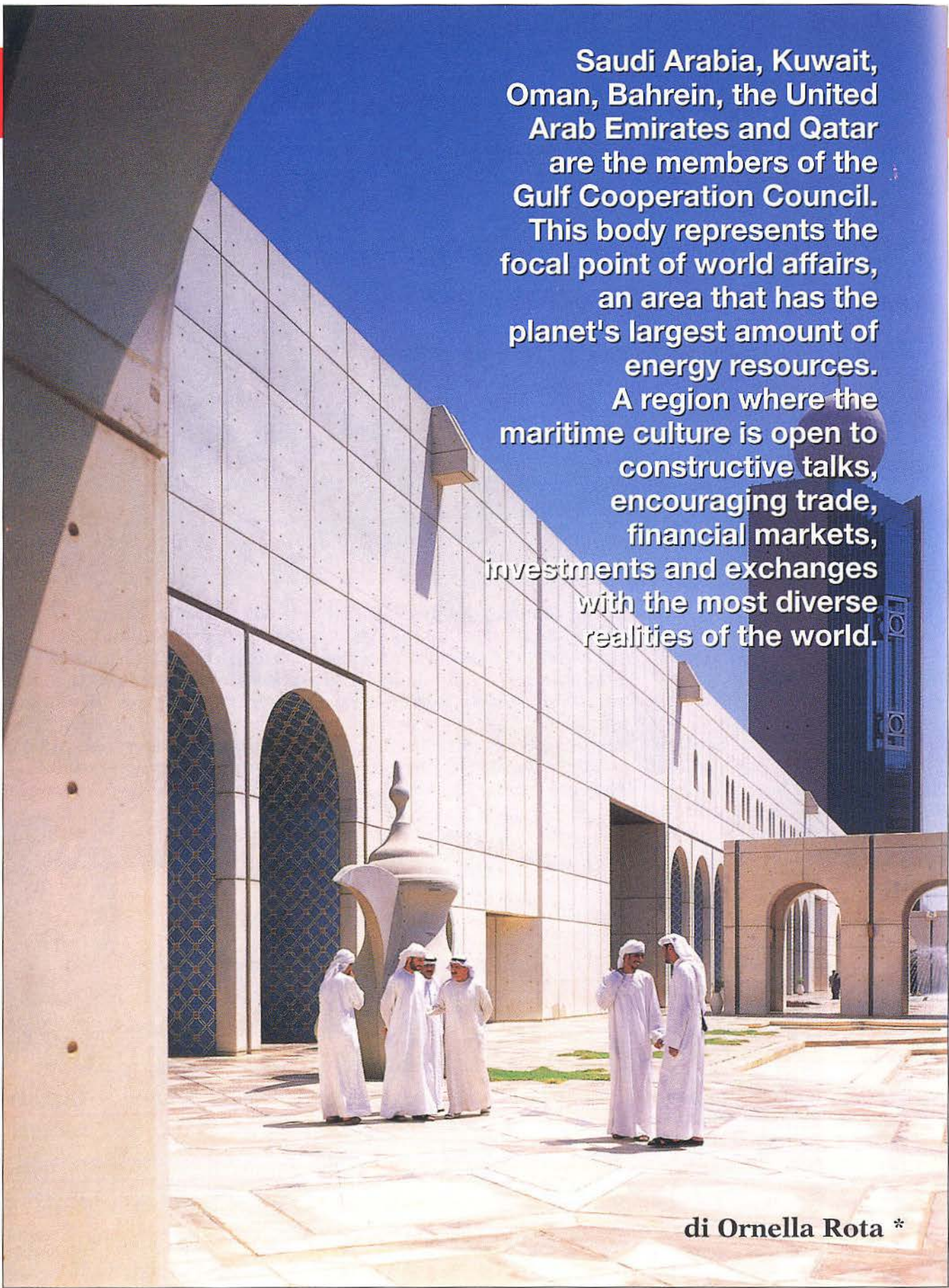
The thick jungle, the steep hills and the inefficient road network hindered the force's mobility on the island. Telephone lines and electricity have been reactivated, but much remains to be done in Dili. Endless rows of houses and buildings have been destroyed. Hundreds of thousands of East Timoreans, who had found refuge on the hills, have returned to Dili, but their houses are completely destroyed. The catholic bishop and Nobel Prize for Peace, Carlos Filipe Ximenes Belo as well as the East

Timor militia leader, Xanana Gusmao, have returned to the capital.

When the first INTERFET operations were undertaken in East Timor, the pro-Indonesian militia ambushed the INTERFET units, which often led to armed conflicts. Many militiamen were killed or arrested, but many others escaped to West Timor when INTEFET reached the island. The remaining Indonesian military units in East Timor finally completed their withdrawal on 31st October 1999 after several and repeated appeals from the UN Secretary General Kofi Annan, the Us President Bill Clinton and the US Defence Secretary William Cohen. This brought the tragedy in East Timor to an end. Many experts believe that it will take INTERFET at least six months to restore peace in the area. A UN force will then have the responsibility of maintaining the peace for another two years.

□

* Brigadier General (ret.)



**Saudi Arabia, Kuwait,
Oman, Bahrein, the United
Arab Emirates and Qatar
are the members of the
Gulf Cooperation Council.**

**This body represents the
focal point of world affairs,
an area that has the
planet's largest amount of
energy resources.**

**A region where the
maritime culture is open to
constructive talks,
encouraging trade,
financial markets,
investments and exchanges
with the most diverse
realities of the world.**

di Ornella Rota *

The Arab States of the Gulf Cooperation Council (G.C.C.) have several traits in common and a quite peculiar institutional situation. Their widespread characteristics are: a public structure centred on families' and clans' authority, a considerable foreign debt due especially to arms purchases, a close alliance with the West, the awareness that oil and gas resources (enormous as they are) are not unlimited and it is therefore necessary to prepare now adequate sources of future income, a social texture marked by a maritime culture with its natural openness towards the exterior, the growing importance attached to education. Saudi Arabia's institutional



ON THE OIL ROUTES

peculiarity is that its soil is all sacred and the King is called "Keeper of the two Sacred Mosques".

The largest part of the Gulf War's military expenses was borne by Saudi Arabia and Kuwait; the representatives of these Countries remember very well the Italian contribution and reaffirm their wish to learn from the Italian military experience. In these two Countries there is still the largest number of Western troops and equipment. The other Gulf States, which in 1990 gave their

contribution, are also hosting some contingents. In 1997, within the framework of a global reorganization of the budget expenses, the GCC Countries undertook to spend 80 billion dollars in five years for projects connected with defence. Long threats and planetary interests gather on the area: Saddam Hussein, who in 1990 invaded Kuwait and who remains irremovable despite Iraq's desperate conditions; the oil-fields, which, only in Saudi Arabia,

amount to 25% of the world known total deposits; the uncertainty about the destiny of more-or-less near large Countries.

The relations of the GCC Countries with the United States and the European Union have become closer especially during the last decade, together with the beginning of flourishing relations with the former-Soviet Islamic Republics and the traditionally strong ties with the great Muslim Countries. Recently, some-tentative relations have started with Israel (Qatar and

The Cooperation Council of the Arab States of the Gulf was constituted in Abu Dhabi on May 26, 1981.

It assembles six hereditary monarchies, not all of them absolute: Saudi Arabia, Bahrain, United Arab Emirates, Kuwait, Oman and Qatar. There are no political parties. Usually the King is assisted by a board of advisers, generally appointed by himself with different procedures in the various States.

Art. 4 of the Statute lists the GCC's objectives: 1- to realize coordination, integration and cohesion among the member States in every sector, in order to achieve their unity; 2- deepen and strengthen the bonds, ties and cooperative aspects existing among their peoples in the various sectors; 3- constitute similar systems in the various sectors, including the following affairs: a) economy and finance, b) trade, customs and communications, c) education and culture, d) social and health affairs, e) information and tourism, f) legislative and administrative affairs; 4- speed up scientific and technological progress in the fields of industry, metallurgy, agriculture, fish and livestock resources, create centres of scientific research, work out common projects and promote cooperation in the private sector, to the advantage of their respective peoples.

The organs of GCC are the Higher Council (made up by the Heads of the member States, with presidents that rotate periodically following the alphabetical order of the States), the Council for the Settlement of Disputes, the Council of Foreign Ministers, the General Secretariat in Riyadh.

Along the years the Council has become a homogeneous reality, capable of handling the events of the region with efficacy, as it happened, for instance, during the Iraqi invasion of Kuwait.

SAUDI ARABIA: area 2,248,000 km²; population 16,929,294 (census of '92); annual growth 2.6% (1992-'97); GNP per inhabitant US \$7,040 (1995).

BAHREIN: (archipelago of 33 islands): area 678 km²; population 508,037 (census of '91); annual growth 3.6% (1992-'97); GNP per inhabitant \$7,840 (1995).

UNITED ARAB EMIRATES: (Abu Dhabi, Dubai, Sharjah, Ajman, Umm Al Qaiwan, Ras Al Khaimah, Fujayrah): area 83,600 km²; population 2,377,453 (census of 1995); annual growth 5.1% (1992-'97); GNP per inhabitant \$17,400 (1995).

The Federation of the United Arab Emirates is governed by the High Council of the seven Emirs - each of whom is absolute sovereign of his Emirate - who choose among themselves the president of the Union, who, in his turn, appoints the Government.

KUWAIT: area 17,818 km²; population: 1,575,983 (census of 1995); annual growth 4.9% (1992-'97); GNP per inhabitant \$17,390 (1995).

It is the only State that has a parliament: 75 persons, 25 of whom appointed by the Emir and 50 elected, on the basis of individual, non political candidatures, by male citizens naturalized for at least 20 years.

OMAN (Sultanate): area 309,500 km²; population: 2,018,074 (census of 1993), annual growth 3.7% ('92-'97); GNP per inhabitant \$4,820 (1995).

QATAR: area 11,437 km²; population: 520,000 (census of 1997); annual growth 1.6% ('92-'97); GNP per inhabitant \$11,600 (1995).

Oman), with commercial offices subject to alternate ups and downs. Apparently, Iraq is also resuming some kind of relationship with the United Arab Emirates and Qatar).

The GCC Countries are of vital strategic importance for the West. Oman, for example, guarantees practicability and access to the whole Arabian peninsula, a position resembling that of Italy in the Mediterranean. The geographic importance of this Country (until the last world-war a key point on the route to India) is much greater than the economic one. To the north, separated from the rest of the region by the United Arab Emirates, Oman penetrates into the Strait of Hormuz with the Musandam peninsula, mountains up to 1800 metres-high rising steeply above the sea, and a dense network of modern connecting roads. To the east it opens on the Arabian Sea and the south faces the Indian Ocean. Sultan Qaboos pursues an all-around peace policy: he was the only Arab leader that supported the mission to Israel of the late president Anwar Sadat (which led to the peace accords of Camp David) and the first Omani head of state to visit India (1997), a State with which Oman has centuries-old relations (until 1947, the Country used Indian stamps. The first Omani stamps were introduced in 1996). Already since 1800, Oman - the second capital of which was Zanzibar - had been stipulating accords with the European powers. It was the first Arab Country to establish relations with the United States.

The maritime culture spurs nations to open up to the world without renouncing their identity, facilitates trade and dialogue, knows that exchanges and connections are indispensable to life. The last meeting of the GCC summit (December 1999), closed with a number of initiatives aimed at increasing the relations with the European Union and with an



Sultan Qaboos meets his subjects during his annual visit to the Country's villages.

agreement that will have a particular impact on the area: the decision of gradually achieving unified customs tariffs in the various States.

For all the GCC Countries, to which oil and gas now ensure an adequate income, the sector of tomorrow seems to be mainly tourism. Al Kuwait, the capital city of the homonymous State, last February hosted the second "Tourism and Market Festival" - whose aim is to advertise music, visual arts, traditions and national products - which was inaugurated in 1999 and aroused a great deal of interest, also outside the area.

Certainly, to attract investments some preconditions are necessary, such as: a social environment propitious to foreign influx, security - which unquestionably already exists: in these countries anybody can go around alone at any hour - and the concrete practice

of tolerance, which is, moreover, the first and principal virtue of Islam. In the Gulf, many realities already go in this direction. In Oman, for example, the majority constituted by Ibadite Moslems (i.e. the followers of the doctrine preached by Abdullah al-Ibadi in the VII century) live peacefully with Sunnites and Shiites, the two main branches of Islam, and with the monotheistic communities of "the peoples of the Book" (i.e., Jews and Christians), as well as with Hindus, who worship their gods in two much-respected temples, one in the capital and one in the south of the Country. The Sultan himself donated the money to build a church to a poor Christian community of the south. The progress of this Country since 1970, when Sultan Qaboos succeeded his father, has been spectacular.

Then there was only one hospital in Muskat, now there are 47; infant mortality was 118 out of a thousand, in 1996 it had dropped to 18.3; there were 10 km of asphalt roads and about 1,700 of

dirt roads, now there are 6,000 km of the first type and 24,000 km of unpaved roads. One of the mainstays of this development has been (is) the attention given to the Armed Forces. Despite its small size (approximately 25,000 men) the Omani Army is one of the best equipped in the world.

Conscription is not mandatory but there are a lot of applications because military experience offers a level of preparation that will be very useful once soldiers go back to civil life. The Bait al-Falaj Museum is dedicated to the history and development of the Armed Forces.

Sultan Qaboos - educated in England, cadet at the Royal Military Academy of Sandhurst, member for a year of an operational infantry battalion stationed in Germany and, successively, in service with the British Army - in a recent speech to young officers said: *"I know that the values I learned have remained and will remain with me forever after my training. I have learned that discipline is not imposed, it is something that one must impose on oneself if one*



wants to be a worthy commander of men. I have learned, moreover, the deep meaning of service: to give and not expect to receive, what counts is the group not oneself. I have learned that responsibility cannot be separated from duty". Meanwhile the Country moves on through the stages of democracy; currently there are periodical elections, in which only a part of the population (men and women) votes to elect selected, individual candidates; by 2003 the right to vote should be extended to everybody.

In all the Gulf countries, the oil profits, which started to pour in during the mid-seventies, have marked (not only in an economic sense) the living standards of the younger generations who, when they are told by fathers and grandfathers of the previous living conditions, know enough to refuse them. Clearly, the identity problems remain but, not rarely, they are turned to advantage, considering that it is quite possible to live in modernity and remain oneself, as many realities of the area unmistakably

show: from the Moslem faith, which is still an amalgamating and very-much-alive factor (even if lived in different forms) to the exploitation of antiquity and archeological finds, from the typical lifestyles to the support of traditional activities, from national sports to dressing styles.

One of the common problems of the GCC countries is their dependence on western technology, a situation very well known to the local authorities, as witnessed by the great sums devoted to the acquisition, diffusion and production of new technologies. Also very high are the expenses for buying from the West products obtained, directly or indirectly, from processing the very crude sold to the West. The priority of the third Millennium is to acquire, produce and offer new technologies (as India shows to have well understood with the extraordinary accomplishment of Bangalore). A similar priority is education, which in the past years has been appearing among the first expenses of all the GCC countries' budgets, which absorb a large slice of the oil profits.

In Oman, there is a school in every village and everywhere girls (50% of the pupils) study with boys. In addition to the university of Muskat (the Omani capital), four more are going to be built by 2002, respectively in Sohar, Salalah, Nizwa and Sur. Saudi Arabia, between 1990 and 1995, appropriated for education 140 billion riyals; today there are 7 universities, besides several specialized centres and high schools. Illiteracy, that in 1974 was 66.9%, in 1995 had dropped to 25.1%. In 1996 UNESCO awarded a prize to the Kingdom for eradicating illiteracy.

All the GCC Countries aim at achieving a national economy based on private enterprise and free competition (although, at present, 80% of the citizens are government employees) and, also to conform to the rules of the World Trade Organization, the financial markets and investments have started to open to foreigners. Of the six Omani ports which serve the entire East, at Salalah the works are in full swing to build a

Facing page.

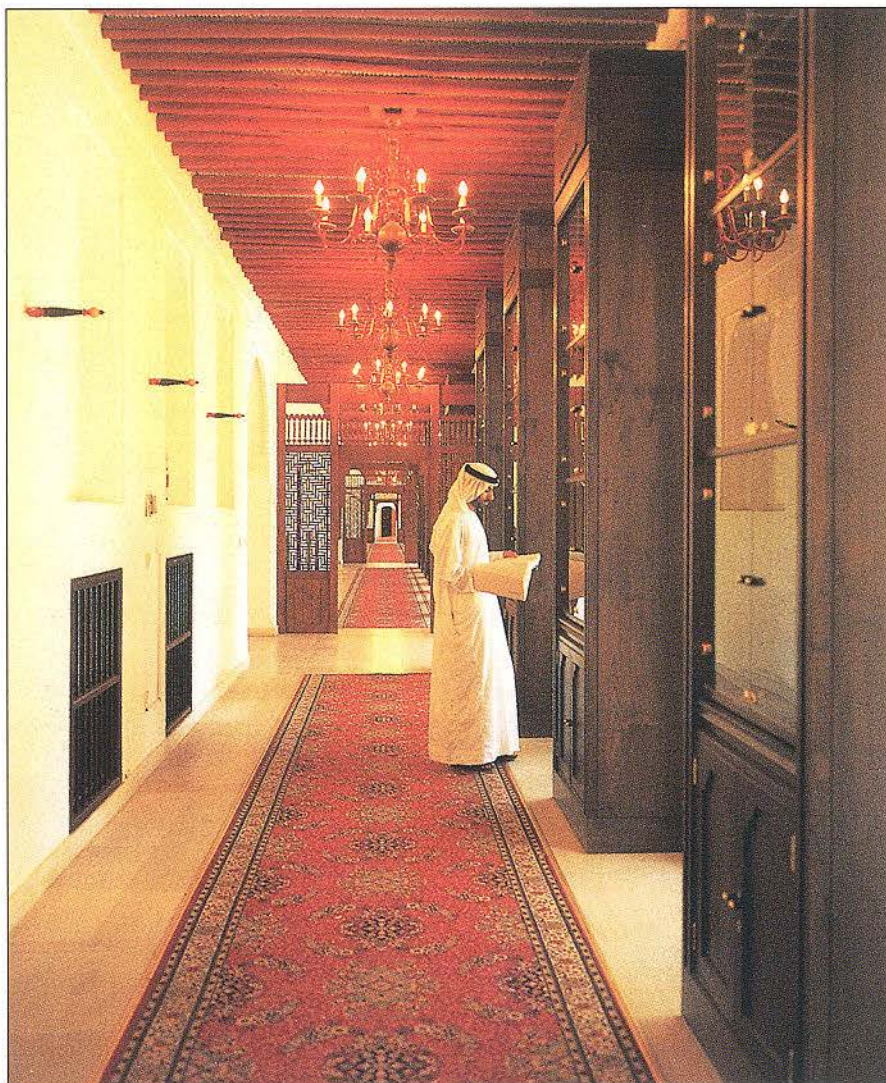
Fort Bahla, in Oman, with its 15 gates and 132 towers.

Right.

Interior view of the Documentation and Research Centre of the United Arab Emirates.

terminal for containers, which is going to be one of the largest in the world, in addition to an important free zone. Abu Dhabi, capital of the United Arab Emirates, by 2002 will end the works to expand its international airport, which will be able to handle seven million passengers a year. Dubai, still known as "the traders' city" is one of the most important centres of world business. In 1997, Saudi Arabia created the first investment fund open to foreigners, the first step towards a gradual abolition of restrictions. In order to finance the acquisition of 61 McDonnell Douglas and Boeing airliners for Saudia (the national airline) the Country had to borrow 4.3 billion dollars from foreign banks. A fact that has delayed Saudia's denationalization. The budget rigour showed by this Country, in 1998 earned it a *satisfecit* from the International Monetary Fund (IMF), which nevertheless insists on the necessity to reduce drastically the bulk of public wages and state subsidies (especially in the agriculture sector). Also in Saudi Arabia military service is voluntary; a preeminent role is attributed to the National Guard, an elite corps of 77,000 men charged with protecting, and under the command of, the Royal Family.

Before the Gulf War, for which it is still paying arrears of the sums pledged at the time, Saudi Arabia has always pursued a policy of great liberality. During the past twenty years, the financial aid allocated to the developing countries amounts to 71 billion dollars. In more than 70 States, 38 of which in Africa and 22 in Asia, the money has been spent to build schools, mosques,



universities, hospitals and cultural centres. King Fahd Bin Abdulaziz Al-Saud continues following the guidelines of the Saudi policy which are traditional of the dynasty that keeps the country under its firm control: solidarity among Moslems, commitment to keep their unity and reduce inequalities.

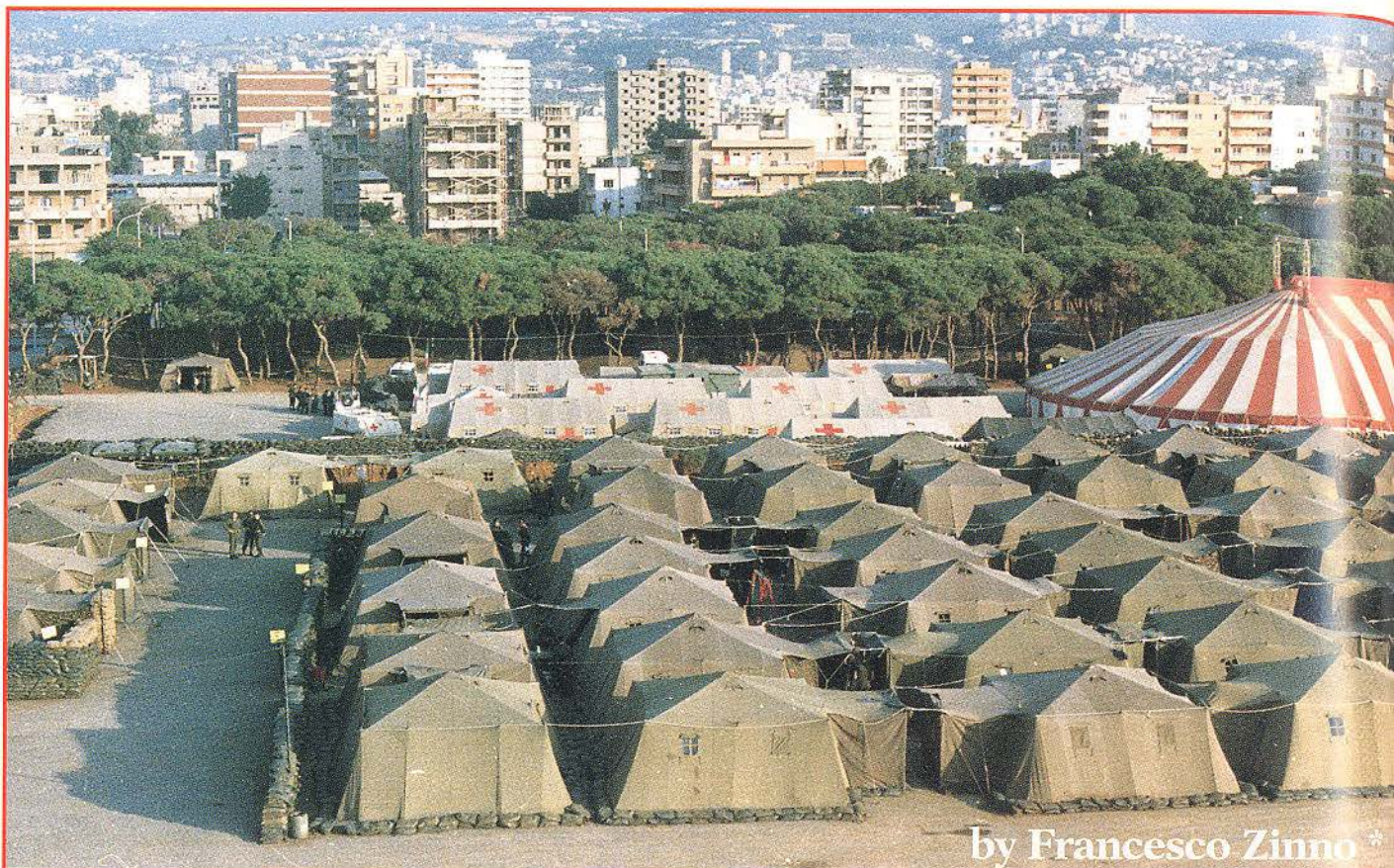
Islam, which permeates every aspect of Moslem life, permeates also every aspect of this State. Being a holy land has inevitable consequences: for instance, as regards freedom of worship for other religions (to ask to build a Christian church here would be the same as wanting to build a mosque inside the Vatican), political and economic decisions, lifestyles, customs.

During the last 10 years, over 70

billion riyals were spent to enlarge and refurbish the Al-Haram mosque, near Mecca, and the Mosque of the Prophet, at Medina, to develop the surrounding areas, building roads, tunnels and services in order to give hospitality to a growing number of pilgrims. The works of restructuring and amplification started with King Abdulaziz, immediately after the Kingdom's foundation; they continued with Faisal and Khalid, but the most imposing jobs have been the last ones, wanted by the present King Fahd Ibn Abd-El Aziz (who has been on the throne since the 13th of June 1982).

□

* Journalist
Contributor to "La Stampa"



by Francesco Zinno *

«INTEGRATED LOGISTICS» FOR HANDLING ARMY MATERIALS

The Army's reorganization addresses pressing budgetary requirements but also aims at reaching the efficiency level necessary to maintain the credibility of our Defense system. Thus, Italy will be prepared to play its part in the foreign policy arena, given its geographic and economic position, as demonstrated by our Armed Forces' growing participation in "out-of-area" multinational peace-support missions. This process is undergoing a very critical phase: several organizational and administrative provisions are

currently in force, as part of an overall plan to downsize and retrain both operational forces and their commanders. Therefore the logistic organization must necessarily be reconfigured as well, and the whole administrative architecture structurally revised, to rationalize logistic activities. Logisticians at all levels must now adopt a new approach: they must abandon old bureaucratic concepts, privileging paper-based logistics over target-oriented logistics. We should start thinking in terms of profit and loss, trying to bring to bear some



Within the Army's critical process the logistic sector too is being thoroughly reconfigured to streamline overheads and enhance efficiency levels.

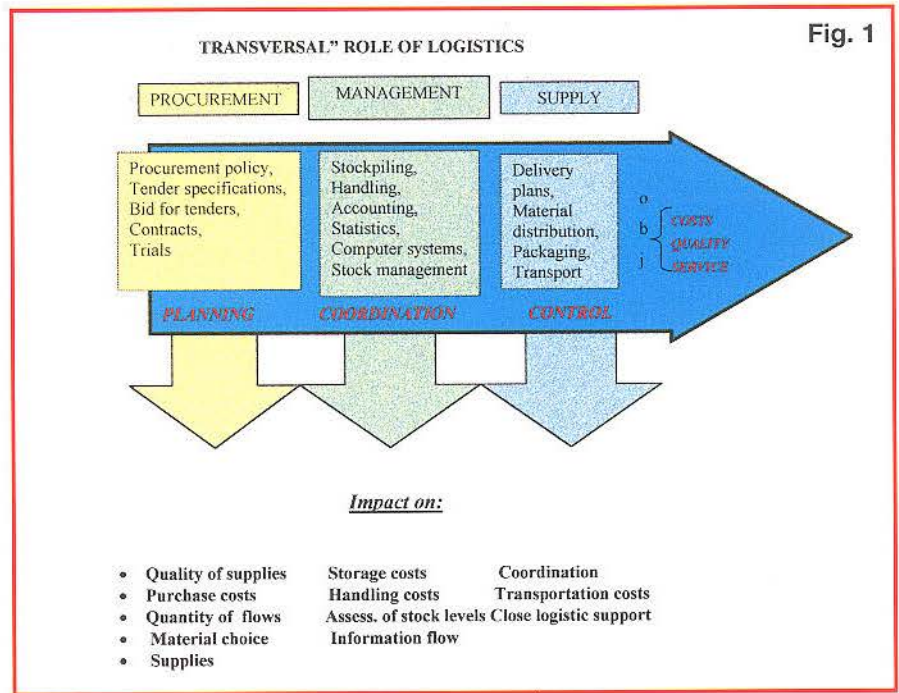


Fig. 1

corporate principles of integrated logistics to meet Army requirements. A profit-centered mentality must give way to a new one based on cost-effectiveness; suppliers must

increasingly be looked upon as partners rather than counterparts. Users must be considered as customers, the "reference market". Lastly stores, stockpiling and transportation are to be reckoned as costs and time as a critical asset.

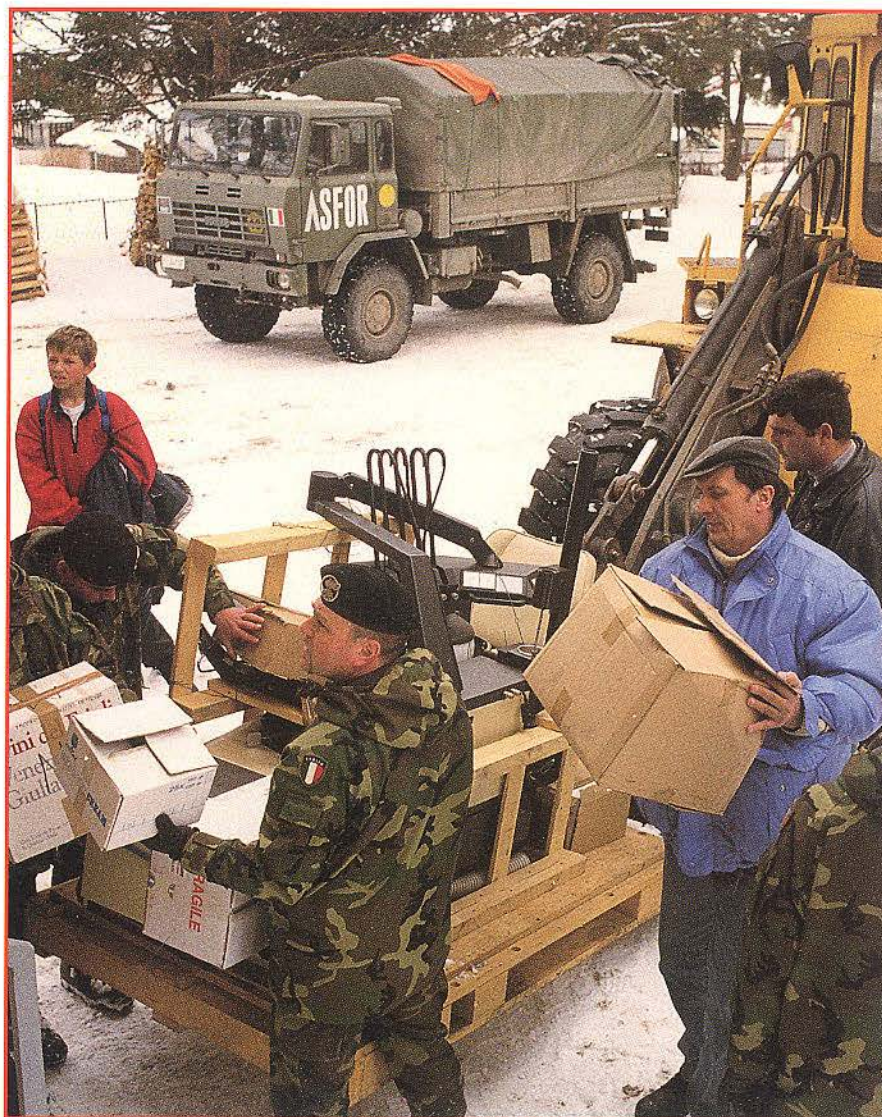


LOGISTICS IN A VERTICAL ORGANIZATION

In the words of Shapiro, one of the founders of modern logistics, "the adoption of a vertical organization to manage tasks requiring horizontal flows of materials and information, is in itself a source of conflicts, as everyone tries to reach their own targets".

Logistics has to coordinate the several concepts underpinning vertical organizational functions, "cutting through" the organization of a company, i.e. it has to coordinate transversal requirements, focusing on costs and quality performances (fig. 1).

Logistics plays a pivotal role as a means of planning, coordinating and monitoring supply flows, especially in environments such as the Army, whose pyramidal structure reflects a vertical organization, in all its fields of activity.



Left.
Distribution of humanitarian aid by SFOR Italian troops in Bosnia.

Facing page.
Giving shelter to refugees requires a huge effort also at logistic level.

Within the Army's logistics organization, where material procurement and supply functions play a key role, the goal of *delivering necessary supplies, when and where required*, is shared by different functions and responsibility levels.

In fact, each decision level supervises a certain sphere of activities, such as estimate of requirements, material procurement and subsequent supply to end-users, to be carried out in the shortest time and at the lowest cost possible.

It follows that over-procurement or under-procurement of materials, based on a wrong estimate of stock levels, will have inevitable repercussions on supplies, costs and the quality of service rendered to end-users. Moreover, a lack of coordination will also impact on

transport costs, create crammed warehouse areas and fail to fulfill units' requirements.

The logistics system, designed to comprise a coordinated range of regulations, procedures, organizations and resources, has to settle possible conflicts arising from overlapping responsibilities (several organizations which do the same things at different levels) or from poorly connected functions. It therefore needs to rely on the resources and the regulatory and procedural provisions necessary to ensure a quality performance at affordable costs.

LOGISTICS AS "INTEGRATION"

Integrated logistics, which has

long been adopted by the corporate philosophy of large and medium size enterprises, is a planning and monitoring process which supervises information and material flows, acting as an integrator between a company, its suppliers and customers (fig.2).

Some medium-term cooperation agreements are to be established, allowing a company to focus on its *core business*, while outsourcing the connected logistic functions, such as packaging, transportation, manufacturing of sub-systems or spare parts.

In some cases such integration takes place also on the ground: many companies, especially those in the automotive and spare parts sectors, have set up plants where third party logistic operators (packaging personnel, forwarding agents...) work in the same area accommodating both the warehouse and the packaging and forwarding departments. Suppliers can be equally asked to establish a storehouse nearby or even inside a plant compound, to minimize times and delivery costs.

This new concept calls for a thorough change in the relationship between a company and its suppliers, who can be considered as external units sharing some common targets, being engaged in a same long-lasting synergic effort.

Integration, however, is not limited to these types of *outsourcing*, but sometimes requires an E.D.I type computer network (*Electronic Data Interchange*) as well, to enhance the information and document flow between the various elements of a company and between a company and its suppliers and customers, making them more sensitive to their



respective requirements.

The on-line exchange of information and documents allows for an early evaluation of each element of information and the adoption of real-time decisions, moving data ahead or instead of people and materials.

In essence, today the logistic concept tends to merge with that of integration, which, in turn, allows a company to concentrate its resources on its core business and assign other connected activities to external logistic operators. Thus, the advantages of a synergic system can be fully exploited both by suppliers and

customers, often connected to the same computer network.

THE "CATERING" SYSTEM

The latest provisions on the management of military mess facilities - providing for the adoption of a catering system and drastically simplified accounting procedures - are proof of the effort made by the developers of this new concept, which will greatly impact both on the economy of human and material resources and the quality of the service rendered.

The catering system may be defined as home delivery of pre-cooked meals. The prevailing trend, however, is to employ units' facilities for in-barracks packaging of meals. A new type of integration will be required between the Defense Administration and the corporate world.

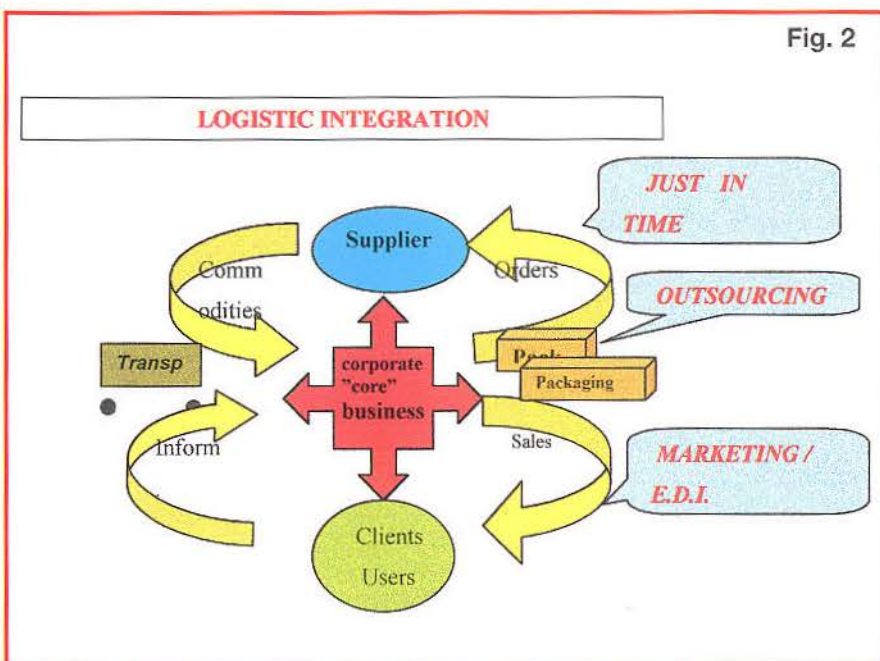
However, the best way of integration is still to be established. A complete management of the service - from victuals procurement to meals distribution - would be the most practicable, but perhaps the most expensive system, ill-suited to fulfill units' operational and training requirements. It would also be the least homogeneous system, as regards the quality of foodstuffs employed, whose standard would greatly change on a case-by-case basis, with limited monitoring possibilities.

Alternatively, a contracting agency could cooperate in the management of messing services, as regards food packaging in particular, which is the real weak point of the present system. In fact, young conscripts performing kitchen duties generally lack a specific training, although the foodstuffs bought by the Administration are first-quality and generally have purchase and management costs lower than those applied by catering companies, whose clientele is certainly more limited than that of the Army.

In sum, it would be more advisable to commission companies to carry out food packaging, provided that they employ the commodities supplied by the Administration. In fact, the military organization supervising foodstuffs procurement and management shall continue to be operational.

All in all, an important step has been made towards a new type of integration which, though still requiring some improvements, sets the groundwork for extending this concept to other sectors and logistic activities, from the procurement to the supply functions, within a new set of

Fig. 2



regulations governing contractual relationships. The focus is shifted from purchase prices to a wider concept aimed at minimizing aggregate costs, while complying with established quality standards, to the mutual advantage of the Administration and the suppliers.

A company should possibly be involved in the initial research and development stages of any item or service, and then take part in the common definition of a procurement policy - purchase by lots, delivery terms, testing procedures. It should also provide for some kind of guarantee and technical assistance at end-user level, in the framework of a stable relationship and in view of a constant and long-lasting supply activity.

PROCUREMENT: OPEN CONTRACTS IN A JUST IN TIME PERSPECTIVE

Another pillar of today's logistics is the almost integral adoption of the *just in time* concept. Initially tested in Japan, this concept is based on the principle that stores identify a company's level of inefficiency in forecasting market demand requirements. The best solution would be to try zeroizing stores and manufacture goods in real-time and in quantities tailored to market requirements. In the Western world this concept has been applied in several ways and by large businesses mainly. In general, as regards corporate cost cutting strategies, downsizing stock levels is becoming more and more important. Consequently, both commodities procurement and production must be extremely flexible and more focused on market demand than on stockpiling, which is a cost to be cut down.

The concept of *just in time* (JIT) production aims at obtaining drastically reduced stock levels and orienting a company's output to the market rather than to stockpiling requirements. This can

be obtained by constantly monitoring sales and gathering the information necessary to anticipate end-user' needs, if possible. A special relationship between the organization and its suppliers is to be preliminarily established, so as to acquire necessary supplies, when and where required only, in indefinite quantities and on a frequent delivery schedule.

On the contrary, in the public sector material procurement follows completely different guidelines, which provide for stockpiling supplies to be periodically rotated, sometimes in excessive quantities for a country ranging among the main industrialized nations. This system is inspired by a budget-oriented procurement policy, according to which yearly contracts are signed to buy fixed quantities of supplies. It may happen that procurement decisions are taken based on spending possibilities rather than on requirement forecasts. The latter may also be invalidated during the interval between their monitoring and the real availability of supplies.

Notwithstanding the efficiency of the military administration, compared to that of other public sectors, the Army's procurement system too is encumbered with a series of legal and bureaucratic obligations, which both extend procedural times and impair the effectiveness of certain evaluations underpinning all procurement decisions.

The decision to buy a certain quantity of goods may be the outcome of an inaccurate estimate of requirements, mainly owing to the procedural times necessary to award tenders often opened to EU countries, and to production and testing times as well.

Moreover, an item can be over-supplied; in that case, especially if it is of a perishable or obsolescing nature, local logistic agencies will forcibly impose it on their users beyond their real requirements, to get rid of it within established time limits (expiry date, new

model, etc.).

It follows that, based on that level of forced over-consumption, if those figures are taken as standard, the item will be purchased in the same, or even larger, quantities, thus worsening the problem. On the contrary, in the case of an under-supplied item, the mere evaluation of its consumption levels will lead to an under-assessment of its real demand. A wise supply policy must therefore be based on the availability of reliable data: among them stock levels are particularly important.

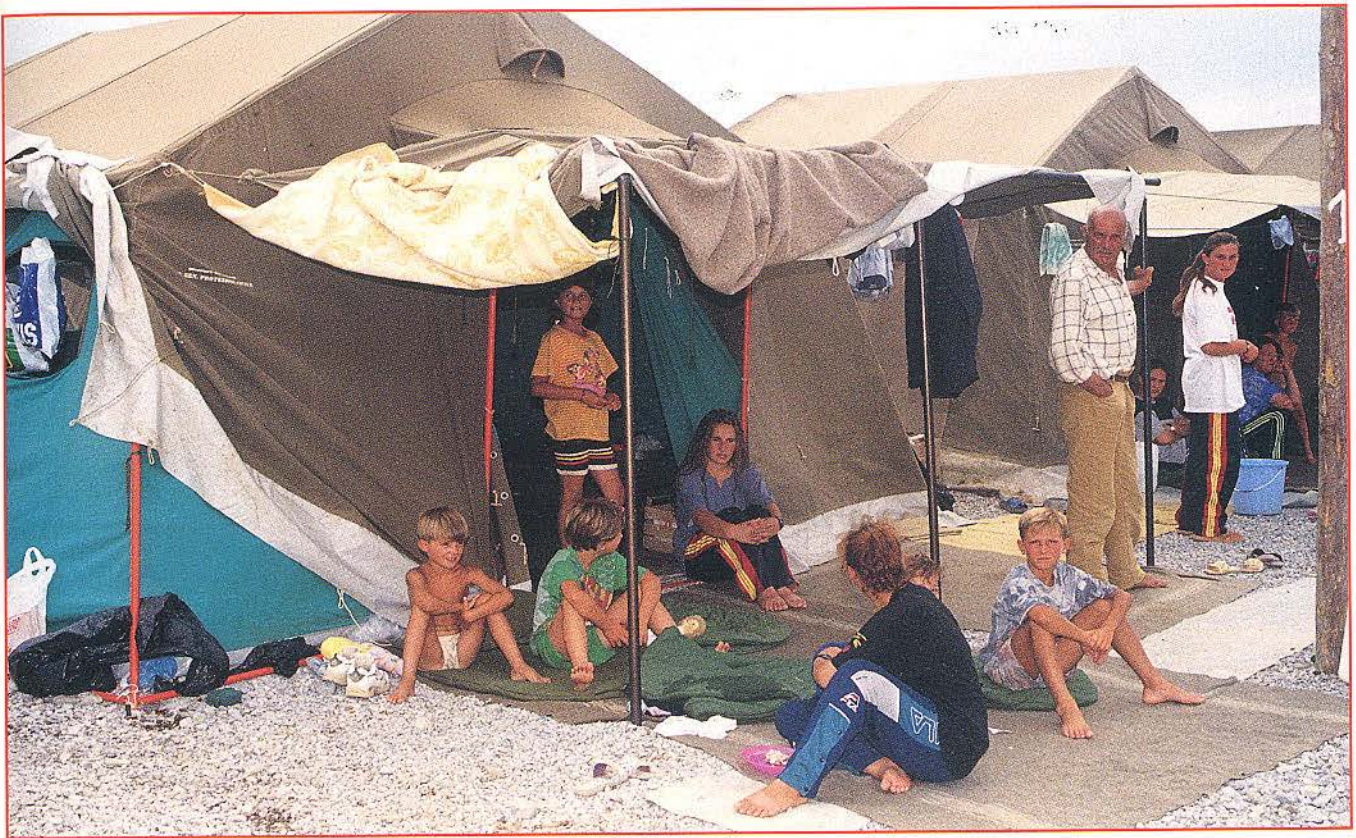
In general, each item is assigned several stock levels:

- an average consumption level within a given time (applicable if the item has always been available), which takes into account both really supplied quantities and outstanding requirements, due to stock unavailability,
- an ideal stock level, equal to the anticipated consumption level, plus a certain percentage to keep as buffer stock,
- a reorder level, marking the limit at which an item is to be reordered in sufficient quantities to restore the ideal stock level; this level varies according to suppliers' delivery times (fig.3).

For example, if 600 item units are averagely consumed every quarter and a 10% fixed stock is to be guaranteed to fulfil unexpected requirements, the ideal stock level will be set at 660 item units, which will allow for satisfying all future demands for that particular item.

Supposing that the item has a 30-day delivery time, the reorder level will be set at 260 units, equal to the amount to be consumed in 30 days (200 units) plus a buffer stock of 60. Therefore, when stock levels go below 260, a new order of 600 units is to be made: upon delivery, stores will be replenished at the ideal level of 660.

Obviously if stock levels are only based on the number of items delivered over a certain period, they will indicate users' consumption capabilities rather than their real



The presence of children makes the tasks of relieving the suffering of refugees even harder.

requirements. For example, the fact that a man can eat one cake a day does not mean that he really needs it and, on the contrary, if there are no bakeries in his town, this does not mean that he would never like to eat some sweets.

The combined effect of these two kinds of misjudgment, due both to the long interval between monitoring a requirement and the real availability of an item, together with the establishment of stock levels based on purely accounting principles, inevitably leads to inaccurate procurement decisions.

Therefore a very common mistake may be made: first a decision is taken and then validated. In this case it may happen that a decision to buy items of a certain quality or quantity is first taken and then users are necessarily urged to use them up.

Generally speaking, *when decisions are to be taken, finding*

the right answers is not so important as asking the right questions. In fact, information must be analyzed and data interpreted beyond their mere quantitative and accounting meaning.

In this case, when an item is under-stocked, instead of taking a procurement decision based on the numbers of items previously delivered, the following right questions must be asked:

- what quantity or quality of products are required to best satisfy users' demands?
- who can assess users' satisfaction levels in real-time and what means are available to rapidly and effectively fulfill users' demands, which are constantly changing both qualitatively and quantitatively?

To solve this problem, flexible and coordinated answers are required, together with solutions possibly consistent with a multi-faceted and changing reality, adopted at the lowest possible level.

Signing *open-end supply contracts* may solve most over-stocking or under-stocking problems. Central

bodies should identify possible suppliers, invite tenders and sign procurement contracts, preferably multi-year ones, define material specifications, price and supply conditions. Supply agencies, instead, (CERICO, CERIMANT.), having a deep knowledge of the logistic situation in the field (fulfillment level of users' requirements against their stock availability), should be tasked with ordering really needed materials sufficiently in advance, taking into account production lead times, as in the case of some commodities already bought at decentralized level.

To reduce procurement lead times (which, in corporate terms, indicates shorter times between the different production cycles or the several procedural stages), some testing mechanisms should be revised. At present, a testing commission can take a decision to *accept* goods only if they totally comply with the requirements set down in the technical specifications. On the contrary, it must reject parcels of goods even if they feature

slight formal differences from the established standards (i.e. package markings, type of packaging, etc). Following a rejection, a company may ask for another appeal test which, in the above-mentioned cases (exclusively formal discrepancies), generally ends up with the acceptance of the goods and the payment of a penalty.

As regards appeal decisions, it must be pointed out that the Central Commission for *appeal* tests has been recently disbanded, as part of a wide range of important changes made in the organizational and regulatory sectors. This move, however, is not a guarantee of reliability and coherence. The members of testing

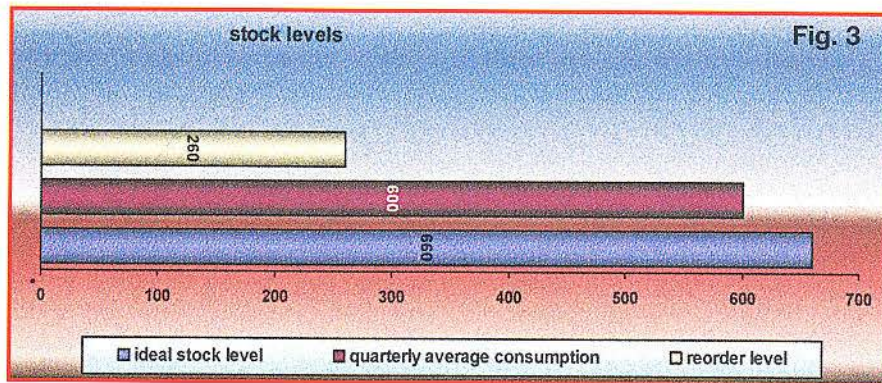


Fig. 3

quality system.

The Ministerial Instruction tries to harmonize testing procedures, at joint level, at least from a quantitative point of view. But the need is also felt to complete the reorganization of the matter by adopting some quality-oriented provisions, to obtain the results hoped for, in the shortest times and at the lowest costs possible. If the Testing Commission had the authority to *accept those batches of supplies featuring slight formal irregularities only, not affecting the required quality and functionality standards*, by directly applying the established penalties, both procurement times could be shortened by several weeks and the connected administrative procedures expedited.

Lastly, time and warehouse space could be saved by carrying out *tests at the supplier's plant directly*. When goods are definitely rejected, there is the possibility of replacing them and restarting the whole testing procedure. But, in that case, the supplier would have to shoulder transport, loading and unloading charges, which would

commissions are chosen at random, in line with a widely-shared concept calling for the abolition of rigid schemes and selected teams of appointees, who were legally vested with the authority to carry out testing procedures (e.g. consignees). This principle, however, when transposed to a higher level, as in the case of an appeal decision, may trigger discordant behaviours and decisions.

Another key innovation is the Ministerial Instruction on testing procedures, issued in early 1999. It incorporates regulation UNI ISO 2859, providing for a technical instrument called *indexed sampling*

plan, to be implemented by the Commission so as to define the sampling amount to be drawn from each batch of goods (commensurate to its established *testing level*) and the *acceptable quality level* (applied to those defects detectable through organoleptic analysis only).

Therefore, during the negotiation phase, the Administration sets these two parameters -testing level and acceptable quality level. It also establishes the tolerance level to be applied to the materials to be procured, obliging the Testing Commission to follow a strictly statistical evaluation method, in line with the rules governing the

"Centauro" armoured vehicles crossing Sarajevo streets.

become three times higher than the amount initially forecast. Moreover, military warehouse areas would be over-crammed for some months.

In short, the goal set by the procurement policy should not only be to balance the budget with the financial assets available, but also to effectively and promptly fulfil users' requirements. In fact, this is the real mission of any private or public procurement organization.

SUPPLY: INVERTED FLOWS, JUST IN TIME AND "OUTSTANDING ORDERS" MANAGEMENT

The above-mentioned considerations have a particular bearing on the adoption of the just-in-time concept for the management of supplies. In fact, a targeted supply system is required, providing for frequently scheduled deliveries of goods, often from suppliers to end-users directly, and streamlined testing procedures. Thus, times, transport costs and crammed warehouse areas could be reduced and, what is more important, units' requirements adequately matched.

If, for the sake of simplicity, we imagine that all hurdles standing in the way of an efficient supply system have been overcome, two key issues are still at stake, to maximize this function in a just-in-time perspective:

- transport management, presently based on the principle of home delivery;
- the possibility for the users to have access to supplies.

The disbandment of some Army logistic bodies has widened user numbers, greatly lengthened the logistic leg and the time required to meet the needs of a growing number of units, away from their

Supply Centers.

Meanwhile the so-called inversion of supply flows has taken place, i.e. materials are forwarded from the supplier to the user, with the employment of military carriers (a RE.LO. SU for each area) or civilian contractors.

The problem of reducing the times between different production cycles is also felt in this case: in fact, at least 15 days are required for completing the bureaucratic course between the supplier's transport request and the carrier's availability to forward materials.

Equipping major Supply Centers with an adequate transport task force would ensure timely and flexible supplies at extremely lower costs. This option is envisaged by the plan for the *experimentation of a new close support concept*, presently applied to some Regiments only, but hopefully to be adopted by all units in the future.

In this way, also the request for a civilian carrier, if required, could be directly addressed by the Supply Center to the Logistics Inspectorate, if not to the carrier himself, so as to reduce overall supplying times.

The advantage of delegating the executive phase of the procurement activity (delivery orders) to Supply Centers has already been pointed

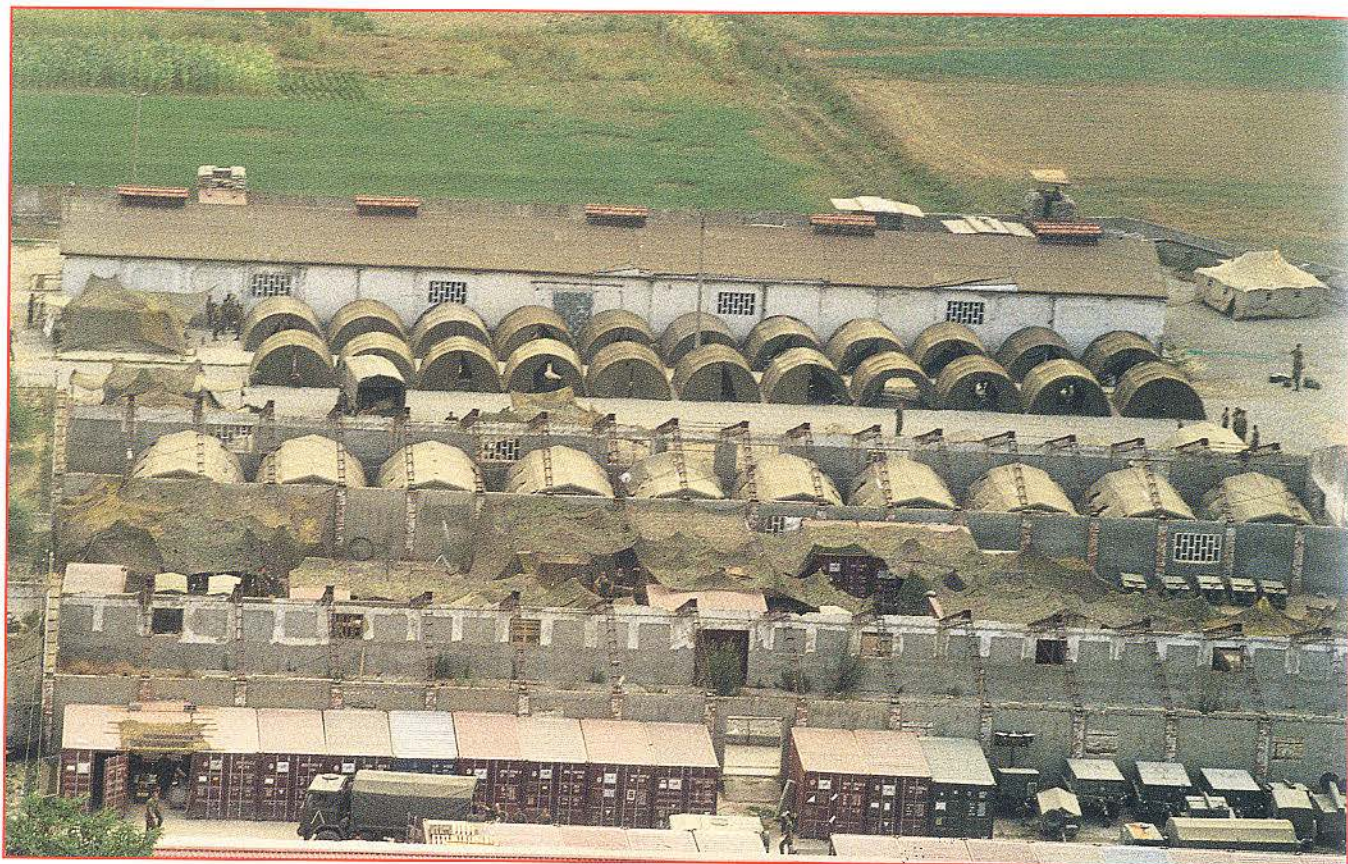


out. In fact, this way necessary goods will be delivered, when and where required, complying within a system of regulations and limitations set by Central Authorities.

The same principle applies to the executive phase of the supply system: once the general framework governing material employment has been established, *the unit's commander* should be responsible for per capita or unit allowance and minimum service life, etc..., together with the *assessment of requirements* and the requests for supply.

When the Supply Center receives a request for supplies, it should do its utmost to fulfil the said requirement, without making any formal or substantial evaluation, which would entail both a waste of time and administrative work.

In short, *a service must first be rendered and then reckoned*. Supplies are first to be delivered, as required by the unit's commander (in fact, who could assess his unit's real requirements better than he?). At a later stage, the Area Logistic Command, instead of preliminarily analyzing single requirements, could carry out inspections at unit level, taking into account the whole organization of the sector concerned (food supplies, uniforms, barracks fittings,



Housing and logistic support are key for units deployed in out-of-area mission.

vehicles...). Thus, an overall assessment could be made whether the requests for supplies were legitimate and commensurate to the real functional requirements in the field and whether these supplies were duly employed.

A mixed system is currently in force as regards the delivery of supplies. Some items are forwarded by the Area Logistic Command, after scrutinizing the documentation attached to units' requests. Other supplies, instead, like food or sanitary items, are automatically allocated on a per capita basis, following a unit's request to its Supply Center. Other items, like uniforms, are managed by a mixed system, providing both for automatic distribution (conscripts' first clothing allowance) and

A convoy of the Italian Contingent in Albania.



In out-of-area missions the availability of field operating-rooms is of critical importance.

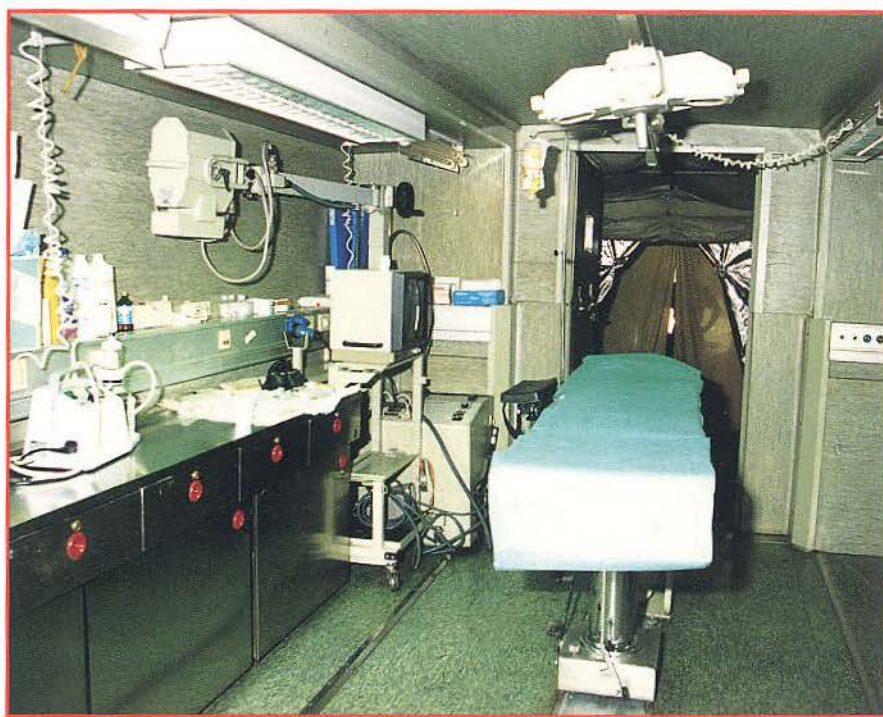
controlled distribution (follow-up supplies).

Obviously, to speed up the delivery of supplies, controlled distribution should be limited to a small number of articles (tents, field kitchens, combat rations, thermal sleeping-bags), which must necessarily be assigned at central level, given their economic and strategic value.

A supply system, based on an automatic distribution of supplies, requires an automated material tracking system to fulfill requirements following the *just in time* concept, inter-connect the Logistics Inspectorate, Area Logistic Commands, Supply Centers and Regiment-level units, and allow for sharing real-time data on material tracking, in terms of item availability and location.

A system of this kind, the S.I.E. (Army Information System) is presently being tested by some units to also manage units' outstanding orders, i.e. monitoring data on materials ordered and not delivered yet by suppliers, being temporarily out of stock.

Not only could this system provide for the replenishment of supplies, as soon as materials are available, without obliging users



to repeat their orders, but could also help in assessing stock reorder levels. In fact, it takes into account both the number of items delivered over a certain period and outstanding requirements. It could therefore be possible to carry out a detailed analysis of the overall demand, without which all attempts to build up an effective logistics structure would fail.

CONCLUSIONS

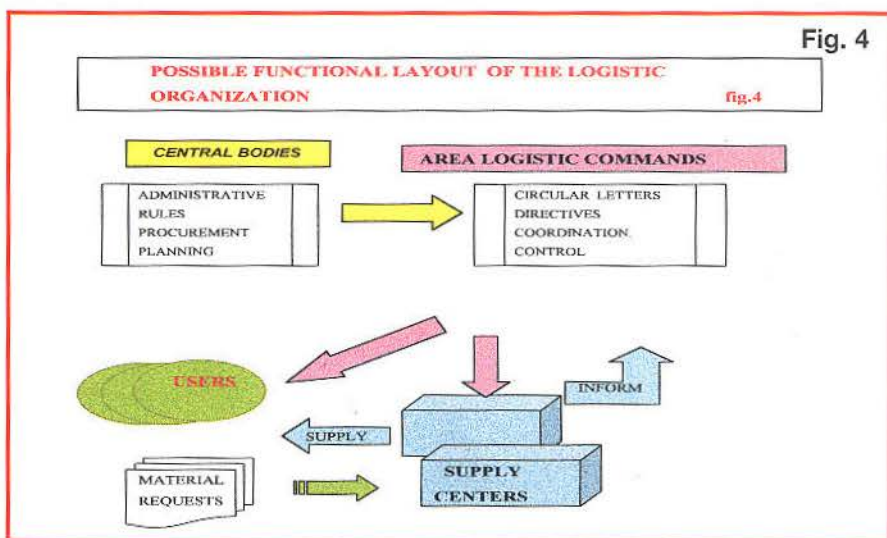
The subjects dealt with so far, though limited to the most

important aspects of material handling in military logistics, focus on the necessity of keeping constantly in contact with the external world, which can in no case be overlooked. This is mainly true for those logistic activities involving private companies as well and which have become central to all reorganization policies, focusing on two seemingly conflicting targets: cutting down fixed costs and operating expenses and enhancing the efficiency and productivity level of the corporate system.

The basic choices made by the military leadership presently in charge show that a new mind-frame is prevailing, coupled with great sensitivity to this kind of problems.

Now also grass-roots workers must take part in this reorganization process, requiring an ever increasing level of professionalism and coherence among rules, procedures, resources and selected targets. Following this path will lead to a definite shift from a power-oriented to a service-oriented mentality.

** Lieutenant Colonel,
Northern Area Logistic Command*

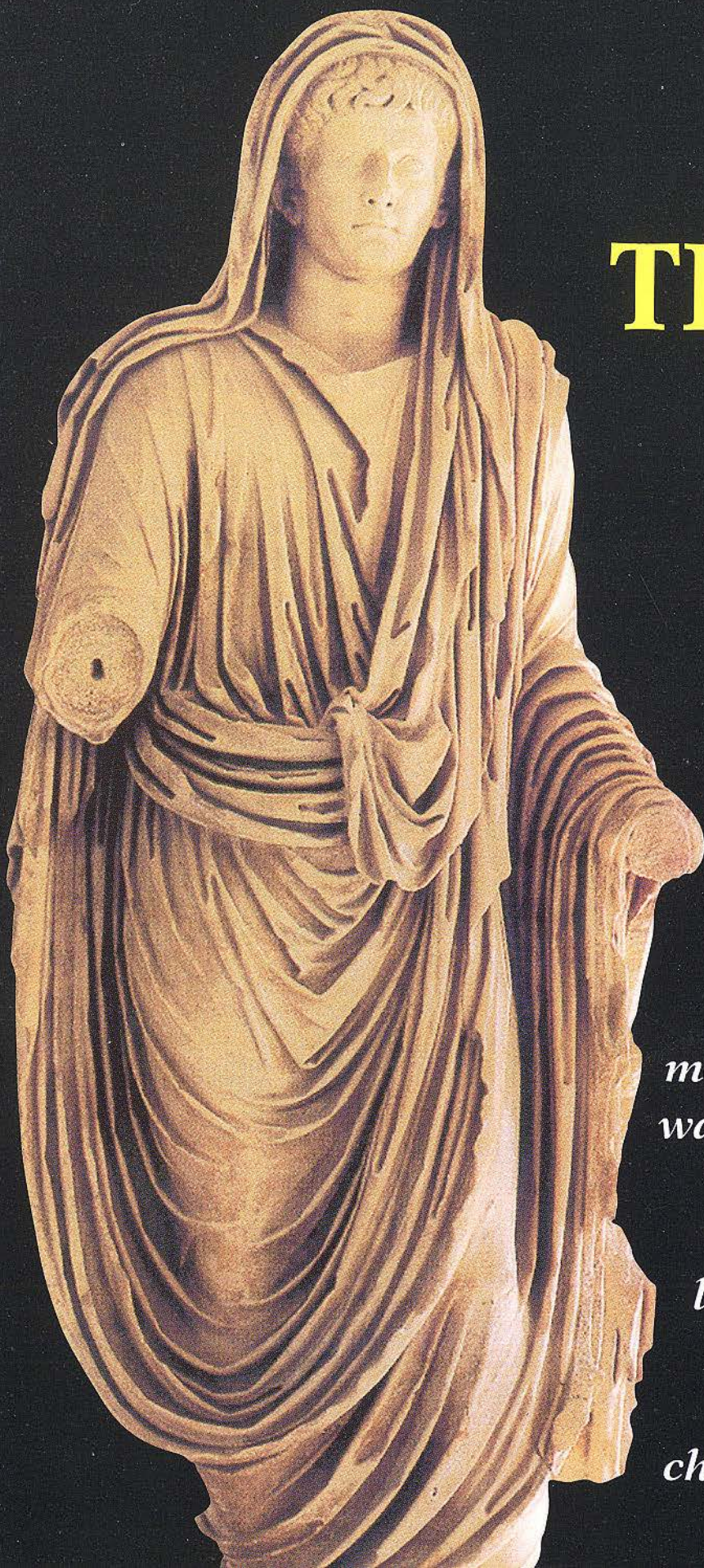


ROMAN
EMPERORS

TIBERIUS

by Carmine Fiore *

*An excellent soldier
and administrator,
Tiberius tried to
reinforce his empire
more than enlarge it. He
was undoubtedly a great
monarch and his bad
reputation, due to the
loose life he lead in his
last years, mainly
depends on the
chroniclers of that time.*



Tiberius was Augustus' successor - an heir who was not loved but imposed by a grim fate.

Tiberius' whole life was influenced by Augustus, first his stepfather and then his father-in-law, who affected Tiberius' decisions and activities for a long time, even after his death.

The key element to successfully evaluate Tiberius' actions is a clear understanding of his interpersonal relationship with Augustus, mainly at a psychological level.

When Augustus died, Tiberius was 56 but had never been young.. During his boyhood, adolescence and maturity, he was burdened by his stepfather's presence which was sometimes hostile.

Tiberius, together with Agrippa, was Augustus' most successful general as he always won on every front.

Almost all of Augustus' victories bear Tiberius' name. He was loyal, disciplined and obedient. The only moment of proud rebellion was when he lived in voluntary exile in Rodi for seven years.

He was called back to Rome due to the tragic events which had taken place there and again proved to be an outstanding and unique collaborator.

His devotion, however, could not win his father-in-law/stepfather's affection.

Augustus' behaved wickedly towards him even after his death.

In his last will and testament, he appointed Tiberius as his heir but also confirmed to have chosen him only because all other possible heir had met their doom.

He was a champion of coherence, as he followed in Augustus' political footsteps.

He was Emperor for 23 years and ruled his Empire extremely well for the first years but then, after he retreated to his villa in Capri, years of poor and corrupted government followed. He was always determined and cautious in foreign policy and administered the Empire provinces wisely and



fairly - but he was a true tyrant towards the city of Rome.

He died at 78. In dying at this age, he overshadowed Augustus for the first and only time, given that the man who had always eclipsed him, had died at 76.

HIS BOYHOOD, ADOLESCENCE AND MATURITY

He was born in Rome on November 16, 42 B.C.

His father, a member of the Claudia family had taken sides with the conspirators against Caesar and then with Anthony. Therefore, in the winter of 41-40 B.C., he had to flee to Greece and he carried his wife Livia Drusilla and the young Tiberius with him. In 38, they came back to Rome where a first important event took place. Octavian fell in love with Livia, seeing this relationship as a way of joining two important patrician families.

Livia was obliged to divorce even if she was about to give birth to

The Trajan Column: Roman Legionaries building a fortified camp.

Drusus, her second child.

So, Tiberius was not yet four when he had to leave his father and move with his mother to Octavian's house.

His father died when he was nine. He was adopted by Octavian together with Drusus and became Octavian's stepchild

His value as a soldier made him the best general of that time. He was only sixteen when he took part in his first military campaign. At 22, he went to the King of Parthia to claim the insignia of Crassus' Legions.

Together with his brother, Drusus, he carried out an intense military activity which led to moving the border of the Empire to the river Danube. He operated in Macedonia, Moesia and Illyria.

The conquest of Pannonia (today's Hungary) bears his name.

Female head portraying Livia, Tiberius' mother.

and lost his brother. He poured his energy and care in every mission he carried out proving to be a brave soldier and a good commander but saw himself put aside by younger men.

His wife would have deserved repudiation for her immoral conduct but she was Augustus' daughter and Tiberius did not dare repudiate her.

At 36, disappointed and disgusted, he left Rome and lived in Rodi on a voluntary exile for seven years to devote himself to his studies. He came back to Rome in 2 A.D. due to the tragic events which had taken place there and to his mother's plots. Three years before, Julia had been confined on the island of Ventotene and in that same year Lucius Caesar had died. He resumed his official position only in 4 A.D. after Gaius Caesar's death.

The soldiers of the German and Danubian Legions cheerfully hailed him back.

At last, he was adopted by Augustus and was given proconsular powers and the tribunicia potestas for 10 years.

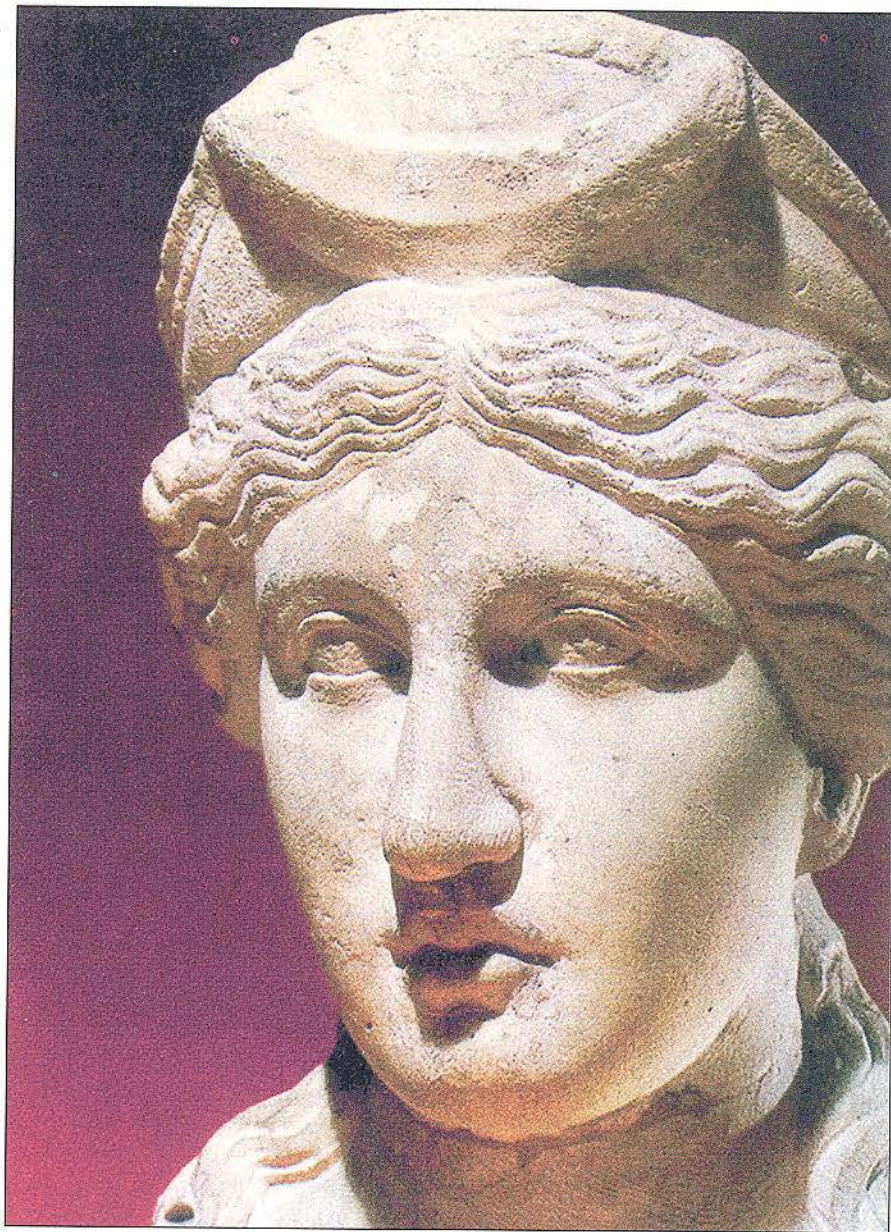
Tiberius cooperated in governing the Empire being almost always engaged in demanding military campaigns in Illyria and Germany.

In 14 A.D., when Augustus died, he was 56.

Augustus might have been aware of the difference in character between him and his heir. But Tiberius serious and meticulous character was the best guarantee for the continuation of the new administrative trend he had imposed.

HIS CHARACTER

The relationship between a son and his stepfather is always difficult and in the case of Tiberius



In 9 B.C., when he was still in Pannonia, he had the news of his brother's death. It was up to him then to continue the war in Germany, where he gained new victories.

Augustus arranged Tiberius' marriage with Vipsania, Agrippa's daughter, who was the great love of his life. But, some years later, in 11 B.C., Augustus meddled again in Tiberius' life and made him divorce Vipsania to marry his daughter Julia, who was Agrippa's widow.

He was the third husband of Augustus' daughter.

The first two husbands, Marcellus and Agrippa, who had both died,

had previously been appointed, in turn, heirs by Augustus.

Apparently, marrying Julia did not lead Augustus into automatically considering Tiberius as his heir.

On the contrary, the Emperor's attention was drawn to his two nephews, Caius Caesar and Lucius Caesar, Julia and Agrippa's sons.

This, together with Julia's immoral conduct, led him into living in voluntary exile in Rodi from 5 B.C. to 2 A.D.

He was bound to success by birth, assets and education but everything went wrong all the same: he had to leave his wife

and Augustus it was even more so.

His life would have been different if he had not felt his stepfather hatred and if he had not been forced to leave the woman he loved.

The memory of Augustus' violent interference in his intimate life haunted him to his death. When he happened to meet his former wife, tears came to the eyes of this embittered man.

On the one hand, this redeemed him and on the other helps us to understand him better.

His manner were coarse and he always preferred to act than to speak.

He was tough first on himself and then on the others.

He was incredibly icy and always self-possessed. In carrying out his administrative functions, he was meticulous and anxious.

But his soldiers whose lives had always been extremely dear to him, loved him also for his character and, at the right time, chose him instead of more brilliant and popular commanders.

Tiberius was considered unemotional but had strong feelings for his brother Drusus and his wife Vipsania whom he divorced because compelled to marry Augustus' daughter, Julia. He also strongly felt that he had to obey and be loyal to his stepfather/father in law in carrying out all his assigned missions.

He considered himself as a "servant of the community", thus expressing the principle made known by Frederick II according to which a King is the first servant of his State.

He was moody, introverted and avoided being paid homage.

His hatred for superficiality, hypocrisy and adulation was deep-rooted.

He did not want temples or statues to be dedicated to him.



Both Caesar and Augustus were able to accept people as they were but Tiberius was not. He had not the exquisite tact of Augustus in dealing with other men.

THE FIRST YEARS OF HIS PRINCEDOM

He was 56 when he came to the imperial throne. By that time, he was dissatisfied and tired, capable and experienced, knowledgeable of the necessities of the Empire, but more a subordinate officer than a commander.

He was a wary and skilled general but not at ease in civilian life and in his relations with the Senate. Long years spent obeying someone else made him suspicious and self-critical. He usually wavered and hesitated when he had to face a bolt out of the blue or an unprecedented situation.

Tiberius was not deeply convinced he would accept Augustus' burdensome legacy but was spurred by the Senate to accept it.

He was given the proconsular *imperium* and the *tribunicia*

potestas for life and not for a limited time.

He was officially declared the first Roman Emperor.

Though historians consider Caesar as the first Emperor, Augustus was the first *de facto* and Tiberius was the first to be elected both *de facto* and *de jure*.

The Principdom began on September 17, 14 A.D. and the new *Princeps* had only his predecessor's example to follow. In fact, during his reign, he strictly respected the augustean tradition and carefully followed Augustus' directives.

He immediately set a good example of moderation refusing both to accept the homage to his mother Livia, already approved by the Senate, and to concede her a lictor and an altar.

He had immediately to face another problem, the rebellion of the Pannonia and Rhine Legions; the latter under the command of his nephew Germanicus.

The mutiny of the Legions set off the crisis of the instrument which protected the security of the Empire. They protested against the extension of the military



Bust of middle-aged Tiberius.

committed by Senators or Equites and also acted as a Court of appeal. The highest level of judgement was in the hands of the Prince himself (this is the origin of the three levels of judgement still in force in the Italian law system).

During his Princedom, he took the Senate into great consideration and respect, often asking the Senators for advice even on trivial matters.

But he was disappointed by those idle and ineffective Senators who did not respond to his stimuli.

He grew increasingly irritated by those incapable and hesitating Senators who did not dare take any decisions by themselves and used to submit all major issues to the Princes.

He sometimes said when talking about the Senators: "They are born to be servants".

Given that the Senators were idle, he had to take decisions by himself and appeal to the equestrian order that during his reign gained further power.

He ruled successfully for some years. All sources agree in describing the first years of his reign as positive but they disagree as regards the last years.

A useful dividing line between the two periods is the year 26 A.D. when Tiberius left Rome.

He hated entertainments, gladiators' combats, seeing them only as a waste of money.

He did not like even those poets and literary circles that had played such an important part in the propaganda in favour of Augustus.

He rejected a proposal to name the month of November "Tiberius" by saying: "What will you do when you have 13 Emperors?"

GERMANICUS

Germanicus was Tiberius' nephew being the son of Tiberius'

service from 16 to 20 years and asked for higher pays.

They also protested because they envied the Praetorians whose military service period was shorter, less demanding and better paid.

Tiberius solved the problem cautiously and determinedly with no consequences worth of notice.

The Legionaries' pays remained as they were under Augustus' reign (225 denarii a year) and, some years later, the military service was again prolonged to 20 years. The Army remained under Tiberius' total control, being a strong instrument of the power of the Empire.

Just like Augustus, he respected the Senate power. Right at the

beginning of his Princedom the power of the Senate was enhanced by transferring elective functions from the people to the Senate itself, which became the body of electors. Tiberius was not the author of this change but simply implemented a plan designed by Augustus.

From that time on, the Senate became the only electoral body while the people were no longer given voice in any decisions.

This was one of the reasons why, right from the beginning, the Emperor was not loved by the people.

The Senate became a Court of Justice under the Consules and was tasked with judging crimes

brother, Drusus.

After Drusus' death, Tiberius adopted Germanicus and gave him the commanding role in military actions in Germany but Germanicus was not very effective.

Tiberius would rather have followed a more diplomatic conduct aiming at stirring up discord among German tribes, according to the old cliché "divide et impera".

He did not like Germanicus' amateurish actions. He was disturbed by Germanicus and his wife Agrippina's popularity.

After the years on the Rhine, Germanicus was sent fighting on the Eastern border, but shortly after he fell ill and died in 19 A.D.. His death drew a dividing line between Agrippina and Tiberius: Germanicus' wife was absolutely convinced that the Emperor was involved in her husband's death.

HIS STRATEGY

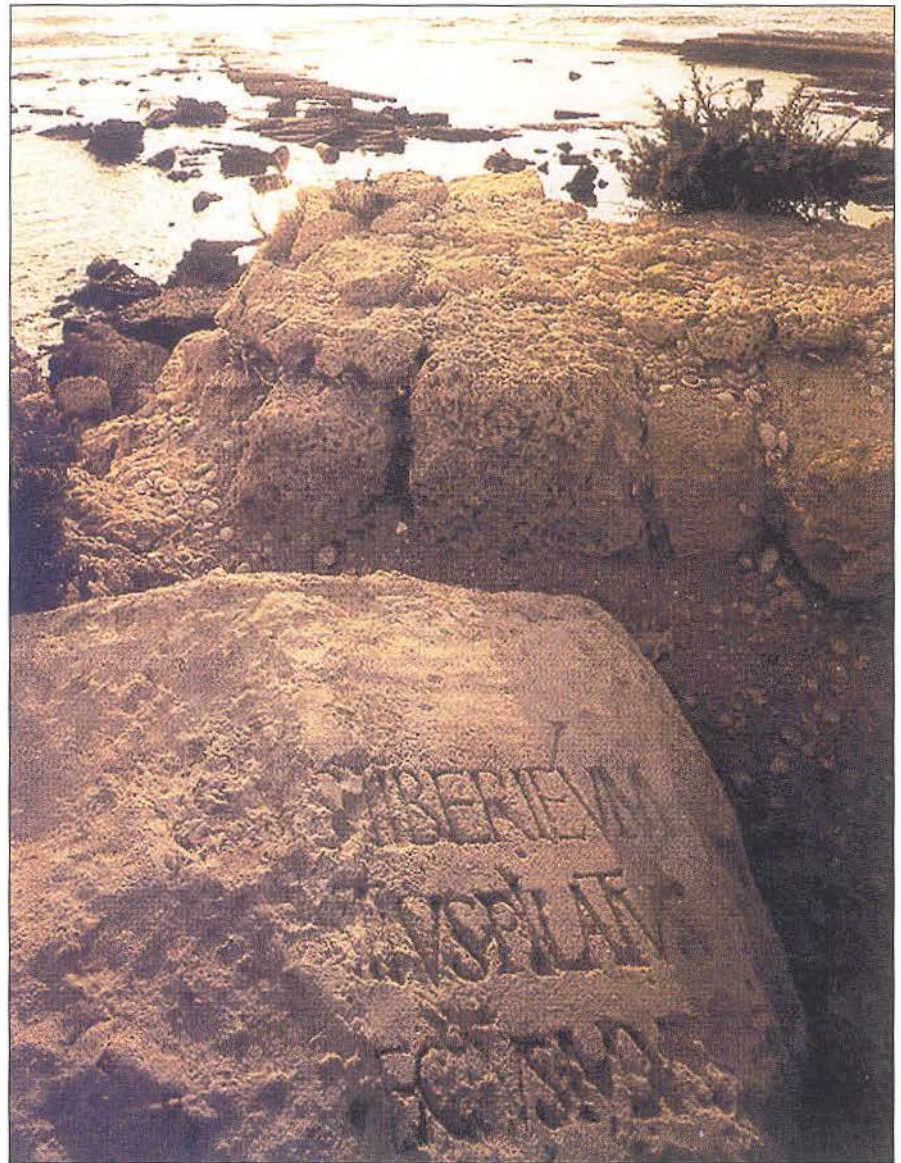
Tiberius carefully followed Augustus' policy also from a strategic point of view.

Even though he had always been a soldier, he did not let his military background condition him and, sharing his predecessor's strategic concept, did not try to further enlarge the borders of the Empire. This proved once again that soldiers are very sensitive to the issue of peace, both for their deep knowledge of the nature and consequences of war and for their own cultural beliefs.

He did not try to resume the war against the Germans to avenge Varus' Legions and move back the border to the river Elbe.

He perfectly knew that natural and human environment and was deeply convinced that diplomacy could be more effective than the use of arms.

He truly cared for his soldiers'



lives and knew that offensive actions could cause a high number of losses.

He preferred taking advantage of the trouble already stirred up among the fierce enemy tribes where contrasts between Arminius and Maroboduus had already risen. The Romans abode by the "divide et impera" rule and, as outlookers, watched the internal fighting among German tribes which came to an end between 7 and 19 A.D.

Following events proved his strategy to be effective: Arminius and Maroboduus fell victims of betrayal. Arminius was killed and Maroboduus was obliged to retire to Italy. The first subordinate

kingdoms were created on the Northern border, thus crowning his patient diplomatic action. He proved to be right. Fifty years had to go by before serious trouble was caused by German tribes.

The rivers Rhine and Danube marked the border between Romans and Germans for about a century till the reign of Trajan.

The same strategic line was followed on the Eastern border. Tiberius was a good soldier, therefore he foresaw not only the complex political consequences but also the operational obstacles which could hinder all actions. In actual fact, there was a number of nations all under Rome's direct or indirect control. The Kingdom of



Personification of some Asiatic cities rebuilt by Tiberius after an earthquake.

Partians, almost as wide as the Roman Empire though less institutionalised, faced the Roman Empire. Conquering this Kingdom could imply utterly exploiting the operational capabilities of the Roman legions and, moreover, there were no major controversies with that kingdom, thanks to Augustus' wise policy.

The only reason of dispute was the influence to exert over the kingdom of Armenia but the situation could be controlled maintaining an a firm and balanced attitude and stirring up discord among the enemies.

THE SECOND PART OF HIS EMPIRE AND HIS WITHDRAWAL TO THE ISLAND OF CAPRI

In 23 A.D. another event caused him great sorrow.

Drusus, the only child Vipsania had given him and who therefore was particularly dear to Tiberius, died under obscure circumstances.

Once again fate was against him. At 64 he lost his only child and heir. Sejanus, commander of the Praetorian Guard, a controversial figure, gradually acquired a great importance.

He cleverly won the Emperor's confidence (not many people succeeded in doing this given Tiberius distrustful nature).

Tiberius trusted him because Sejanus had saved him, shielding him with his body when a cave they were in had crumbled.

The prestige of the praetorian commander grew to a point that Sejanus thought it possible to become Tiberius' successor.

Sejanus' influence was strengthened by Tiberius' growing loneliness.

The death of his son Drusus had been such a sorrowful event that he became even more withdrawn.

He had the suspicion that court intrigues had played a part in his son's death and thus his hatred for the Roman circles grew even stronger.

Behind Drusus' death there was Sejanus himself who deceived Livilla, Drusus' wife, leading her into poisoning her husband. By that time, Vipsania died. She was his beloved wife, a never forgotten love.

He was 63, he felt tired and at the sunset of his life.

His periods of retirement in his villas in Campania were increasingly frequent.

His suspicious, unfriendly, shady

character drew him away from his people. How distant he was from Caesar and Augustus who, though different from each other, had been able to seduce the people.

While leasuring in Campania he became aware of the fact that he did not love Rome, that monster city of one million inhabitants, the city of waste, plots, corruption, adulation and arrogance of the nobles.

Therefore, he decided to execute a plan he had been devising for a certain period, that is to withdraw from Rome. He was then 67.

His face was disfigured by herpes and this helped him to take this decision.

He chose to live in retirement from public life on the island of Capri which Augustus had bought from Naples fifty years earlier and he withdrew in the highest and most inaccessible point of that island of four square kilometres with an extremely favourable climate. He could finally be secluded, live in peace and feed his love for science and culture. There he could satisfy his desire for loneliness which bordered on misanthropy.

He settled in Capri in 27 A.D.. He had been ruling for 13 years but now exerted his authority through Sejanus, thus depriving the Senate of its power which he had enhanced and dignified at the beginning of his Principedom. To speed up communications with the mainland, he created a system of optical signals between Capri and the Sorrentine coast.

But retiring was indeed a serious mistake with the most fateful consequences. Though Tiberius constantly worked for the Empire, he was seen as a deserter and a man in despair and while he was loosing prestige before the people, the Senate strongly highlighted its

inferiority and subordination to the Princeps. From that time on, the Senate was flooded with letters, dispatches, suggestions and orders feeling that it could not react against the will of such a distant tyrant; thus the importance of Sejanus was further strengthened, which was even more ominous.

During this period, a high number of trials for high treason was held and Tiberius was deemed responsible for them. It must be said that Augustus himself had introduced two laws (Papia Poppaea and Julia de Maiestate) which limited personal freedom and were sufficiently unspecified to allow for any possible legal persecution by plaintiffs, magistrates and judges.

This flaw in the judiciary system was cunningly exploited by Sejanus, the commander of the praetorian guard for his personal or political purposes, while Tiberius, trying to mitigate the negative consequences of these laws, did not want to consider defamatory expressions against himself as high treason.

But he was responsible, however, for not understanding how widespread and deep-rooted the tendency was and for not taking more effective measures.

During the second part of Tiberius' reign, the frequent trials, Sejanus' plots and the recurring conspiracies were all parts of an underground struggle fruit of the dynastic system which cast a dark shadow over Tiberius' figure.

The crisis did not strike the whole Empire but only Rome and Tiberius court.

Tiberius did not come back to Rome even in 29 A.D., on the death of Julia who had played such an important part in designating him as Augustus' heir.

Sejanus had become extremely powerful in Rome and had



gathered in Rome all Praetorian Guard Courts quartered in the area now called Castro Pretorio.

Sejanus and Agrippina went on plotting against each other, the former to take over from Tiberius and the latter to have one of her sons accepted as a heir.

Sejanus got the upper hand and had Agrippina confined on the island of Ventotene where she died in 35 A.D. Also her son Nero was exiled and sent to the island of Ponza where he committed suicide. Agrippina's other son, Drusus, died

in prison. But also Sejanus' cunning manoeuvres were discovered and made known to Tiberius.

Tiberius did not take revenge immediately, but when he did it, he mocked Sejanus treacherously.

On October 18, 31 A.D., Sejanus was summoned to the Senate on the pretext that he would be notified of this designation as heir. On the contrary a letter was read out in which the Emperor disclosed Sejanus' crimes, blamed him for treason and ordered that he be

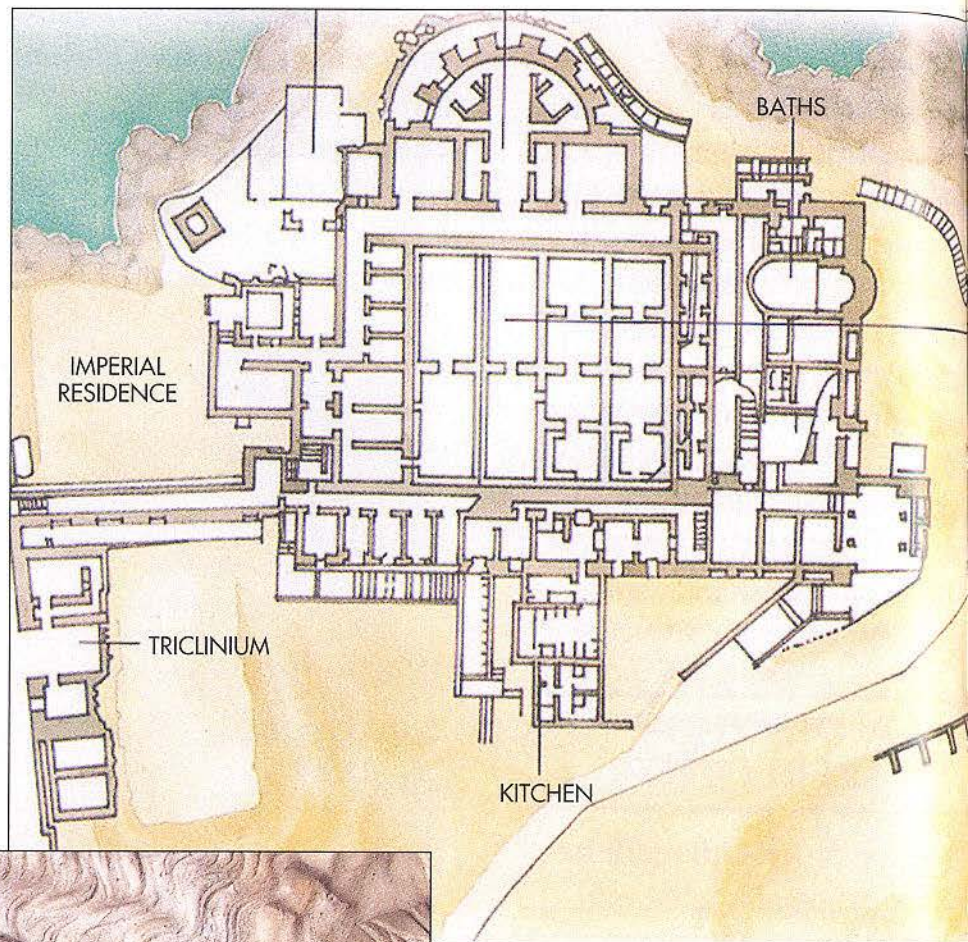
immediately arrested.

The Senate condemned him to death by strangling and the sentence was carried out that same evening.

This triggered off the persecution of Sejanus' family and followers. At this point, Tiberius was sent a document belonging to Sejanus' wife which gave the death blow to his spiritual agony: it revealed that his son Drusus had not died a natural death and that Lucilla, Drusus' wife, had committed adultery with Sejanus and the two of them had poisoned Drusus.

His mind gave way to fear, to self-pity and the desire for revenge and something very similar to the reign of terror followed. Very few of Sejanus' followers survived while Lucilla was forced to commit suicide.

History was not satisfied with leaving him old-aged and in poverty but marked him so profoundly that the very name of

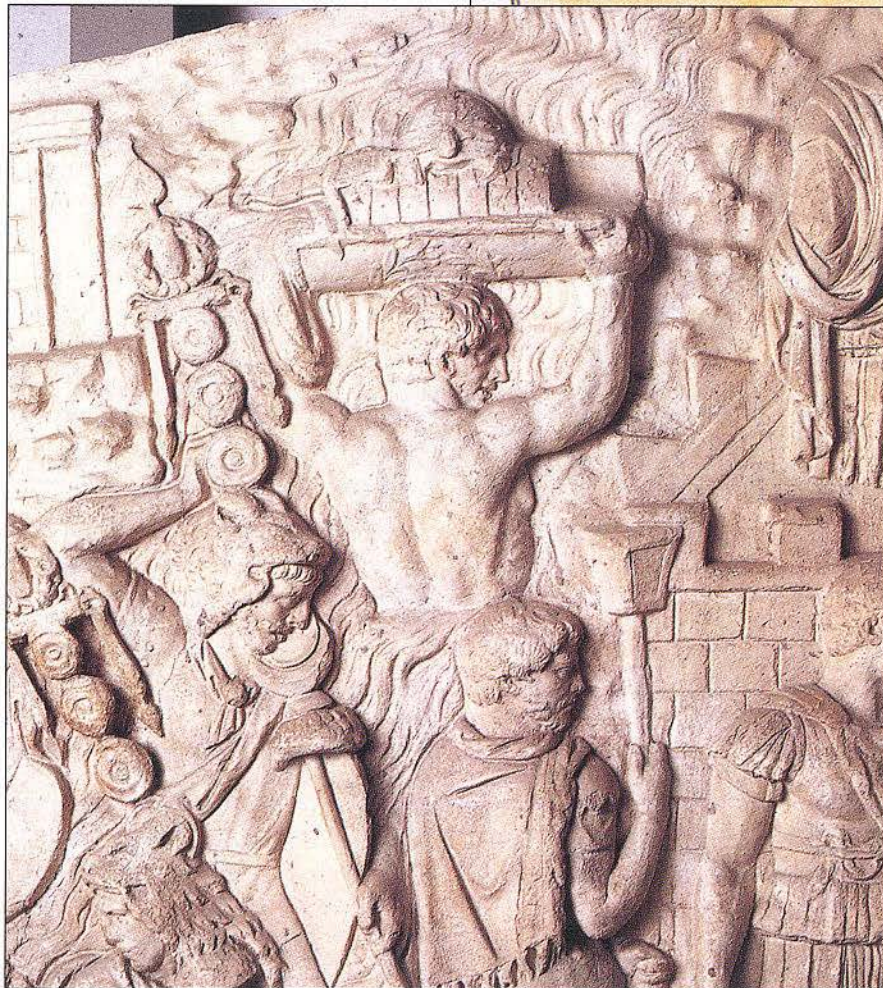


Above.

Plan of Tiberius' villa in Capri, dedicated to Jove.

Left.

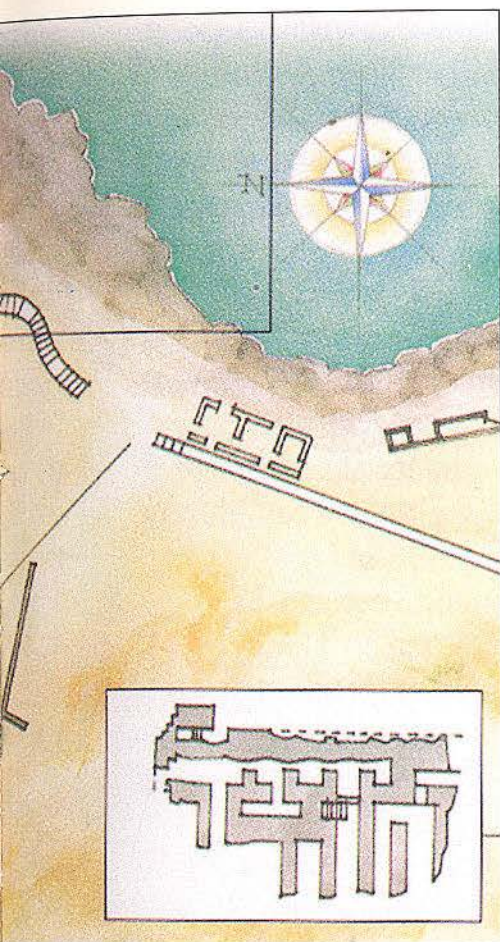
The Trajan Column: Roman soldiers on the march.



Tiberius has become a symbol of unnatural vice and sensuality. His misanthropy bordered on madness - there was even talk of sexual perversion. However, although he was aged and alone, Tiberius found the time to govern Italy and the Empire accurately as ever; foreign affairs did not suffer neither did domestic affairs.

In 35 A.D. he made out his will indicating his nephew Caligula, Germanicus' third born, as heir. He thought his choice was in line with Augustus' wishes which still had binding value for him.

However he can be blamed for not assigning his heir any



responsibility in the military or governmental sectors.

In 37 A.D. he left the island to go hunting in the Circeo area. But he had an attack and was believed dead and celebrations began for the new Emperor, Caligula. But to everybody's surprise he regained consciousness. At this point the Commander of the Praetorian Guard took over and suffocated him with cushions.. All this happened on 16 March 37 A.D.. He had reigned for 23 years. He was 78. He said not a word while dying which was typical of an antisocial person like him.

CONCLUSION

This is how Augustus' heir ended up. Studying what he accomplished, his virtues and defects, a clearly positive judgement can be made as regards his governing the Empire.

As a man he can be judged



rather negatively as head of his family and the embodiment of the newly-conceived Princedom.

He had been strongly committed to serving the State; with a sense of duty typical of the old style aristocratic Roman.

When governing the Empire's provinces, he had ruled with an iron rod without being oppressive "a good shepherd shears his sheep, he does not skin them" keeping a close check on the Governors.

If one of them turned out to be unfit for his duties, he was immediately called back to Rome.

He was famous for being severe: one Procurator who was called back to Rome from his province committed suicide before facing the trial.

He managed to govern the Empire's province extremely well so much so that the Empire not only did not suffer from the squalid internal struggles taking place in Rome but was even unshaken by the critical situations that arose with the following Emperors, Caligula, Claudius, Nero and others.

But in governing Rome he was strongly conditioned by his

Pilate washing his hands - high relief portraying Jesus Christ's Passion.

character, his family and his court that he tended to despise and above all by the Senate. That very Senate which, at the beginning of his reign, he wanted to be more effective and more independent and that, in the end, became even more subordinate and inept so as to open the way to tyranny as it was sometimes the case with the following Emperors.

Tiberius must be credited honest intentions and when globally judged he can be considered as one of the best Roman Emperors.

The government of the city of Rome and of the Empire passed from the Julia family to the Claudia family.

The splendours of the Roman Empire gradually faded away till Vespasian and Titus, of the Flavia family, came to the throne.

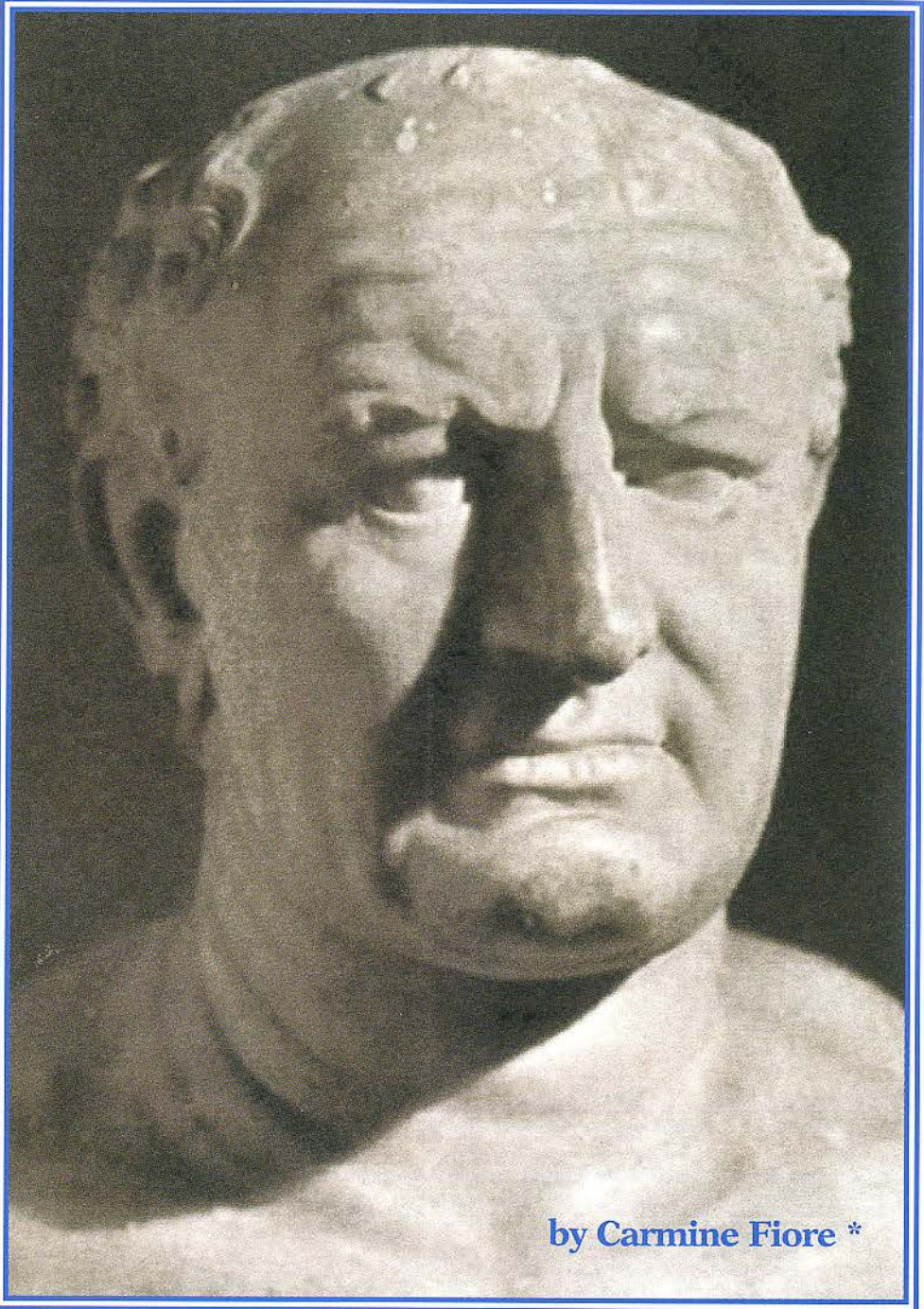


** Major General,
Chief, 4th Division
DGS*

ROMAN EMPERORS TITUS FLAVIUS VESPASIAN

Titus Flavius Vespasian was crowned after the three Emperors of the Claudian family (Caligula, Claudius and Nero), who had subjected Rome to thirty-three years of painful vicissitudes.

He inherited an empire falling apart. During the nine years of his "princedom", he managed to accomplish a complete reorganization of the State on the military plane and on that of civilian and administrative realizations. History attributes him the merit of having tidied up the finances, given a great impulse to town-planning and reformed the Legions' system. Therefore Vespasian deserves to stand among the best Emperors.



by Carmine Fiore *



A PEASANT PRINCE

With Tiberius, the Claudian family came to power, replacing the Julian family. After the great Caesar and Augustus and after Tiberius' good administration, the Claudian family expressed three more Emperors (Caligula, Claudius and Nero) but with them Rome lived through 33 years of painful events.

Caligula and Nero committed excesses and gave signs of lunacy which were only partially mitigated by Claudius' shrewd administration. Mean court intrigues emerged in a sinister light. As it had happened with Tiberius, the praetorial prefects played a nefarious role. Also the Legions, which had been the framework of the Roman power,

started to revolt. People lived in a state of military anarchy. 69 A.D. was the year of the three Emperors imposed to Rome by the force of the Legions: a doleful year of civil wars, during which the Legions fought each other in order to impose their own Emperor.

The Administration created by Augustus and consolidated by Tiberius was the strong platform that saved the Roman Empire. The Empire functioned excellently also under Caligula's and Nero's eccentricities. The political leaders had produced many leaks, but the administrative organization set up by the great Emperors had been able to save the State from the wreckage.

Now a new Emperor was needed,

one who could be, and felt to be, the Prince of the whole Empire as a total unit, and not a more-or-less whimsical Lord of the urban aristocracy.

Vespasian emerged from this dark environment. He was 60 years old and seemed destined to be a brief meteor, but he governed Rome for nine years, and it was a period of great resurgence. He was the Emperor of the Jewish diaspora, of the tax on urine, of the Colosseum.

He inherited an Empire falling apart. He was a General but was always aware of his peasant roots. He closed the temple of Janus and built a Forum dedicated to Peace. He left the Empire reconstructed in its morale, finances and military capability.

The Flavian dynasty, that started with him, gave the Empire an era of extraordinary security. After the disappearance of the eccentric splendours of the Claudian family, Roman history lost the character of mere court chronicle and acquired that of history of the peoples belonging to an immense Empire, that were starting to enjoy the fruits of a common civilization.

ORIGINS AND CHARACTER

He was born in Rieti in 9 A.D., in a peasant family with no aristocratic traditions, became a soldier and served in almost all the Provinces, particularly in Germany and Britannia. He obtained the Consulate in 51 under Emperor Claudius; being an upright man, Vespasian obviously clashed with Nero, who banished him. A story tells that Nero did it because Vespasian had fallen asleep during one of his concerts. However, Nero remembered this brave General when, in 66, unexpectedly, he entrusted him with the command of three Legions and subsidiary troops to subdue the revolt that had flared up in Judaea.

He was not brilliant but pliable and persevering: once convinced that something had to be done, he carried on with obstinacy and resolution, surmounting all obstacles. He was no aristocrat and neither was he a refined eccentric. He had known poverty and learned to lead a peasant life. But he was also cultivated and capable of telling a joke in Greek and Latin. He had the sound concreteness, the sharp wit of the peasant but, above all, a lot of common sense and... his feet stood firmly on the ground.

Vespasian exemplifies the type of man to whom Princeship offered a career in public life which would have been impossible during the Republic. In fact, his father belonged to the equestrian order.

He had almost always worked in the Provinces. It was a useful and precious experience, for him,



Funerary stele of Gaius Largennius, member of the II Augusta Legio (Königshofen, Germany, 1st Century A.D.).

the Empire and the Provinces themselves.

His candidature to the imperial office was proposed by Egypt and the eastern Provinces, and supported by the Legions stationed there.

His career had been praiseworthy, although not exceptional, and wherever he had served he had left a very good memory. Along the

Danubian frontier his candidature was received with great enthusiasm.

At the end of the civil strife against Vitellius' Praetorial Cohorts, Vespasian's supporters came out as winners.

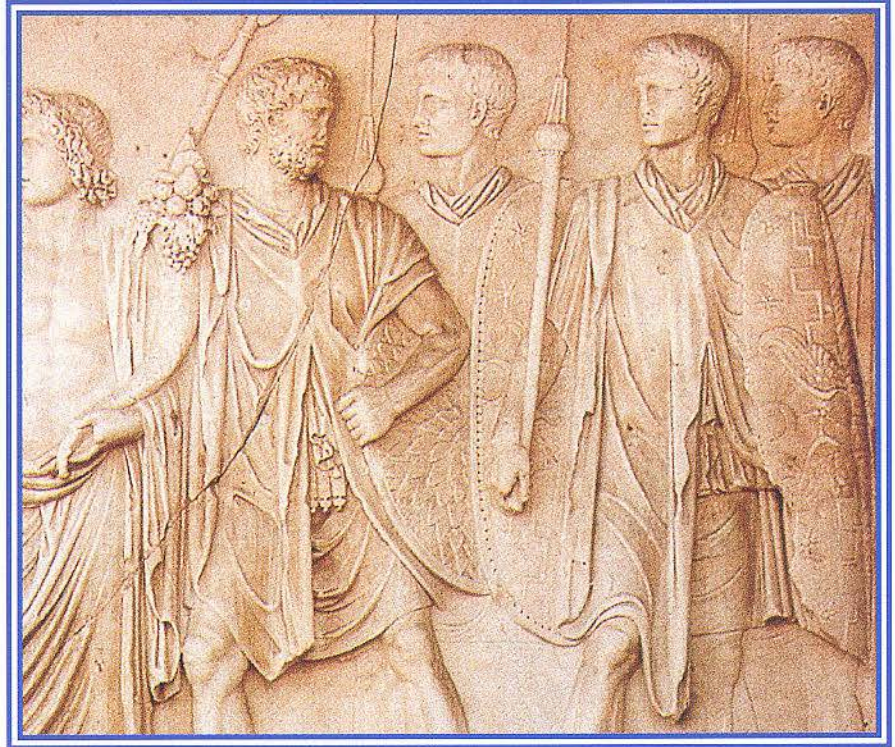
Vespasian was designated Emperor in December 69 A.D. while he was Governor of Judaea, but in the summer of 70 he was still in Egypt. There were rumors that he had miraculously healed a blind man and a cripple. It seemed that the prophecy (referring to Christ),

which foretold that a man from Judaea would come and rule the world, had come true.

HIS FIRST STEPS

Proclaimed Emperor, he entrusted the command of the operations in Judaea to his son Titus, but did not immediately return to Rome. He started to consolidate his position from afar and he took advantage of his slow return journey to acquaint himself of the local situation of many Provinces and cities of Asia and Greece (as Augustus had done in his time).

He arrived in Rome in 70 A.D. and immediately reduced the number of the Praetorial Cohorts from 16 to 9, placing them under the command of his son Titus. It was necessary to convince everybody that also the



Right.

Roman soldiers armed with javelins. (Rome, Palazzo della Cancelleria).

Below.

Roman helm made of iron, copper and silver, (Besançon, France, 1st Century A.D.).



Legionaries could be controlled. Vespasian managed to enforce discipline on the Legions by giving them capable Generals, chosen particularly among the Italics and the Provincials.

A most urgent necessity was to redress the moral and psychological

damage of the civil war and restore confidence in the whole Empire. This needed the patient work of a surgeon and Vespasian was not wanting in it. Under him the State started again on a prosperous journey.

He was a man of simple tastes, not accustomed to squandering. He bluntly stopped the eccentricities and luxuries of the Court, imposing a tone of moderation and frugality. He promoted everywhere and continuously the Roman culture and civilization. His granting the Latin Law to the whole of Spain is proof of it.

His aim was to achieve a high level of efficiency. A dandy, who came before him drenched with perfume, to thank him for an appointment he had obtained, was dismissed with these words: "I'd rather you smelled of garlic" and had his appointment cancelled.

He showed his gifts of wisdom and common sense by leading a life without ostentation, but affirmed immediately the principle of dynastic succession.

He involved his son Titus in the government of the Empire from the beginning. They were Consuls

Bronze mask-helmet (Necropolis of Catalka, Bulgaria, 1st Century A.D.).

birth to what later became the middle-class.

THE REVOLT OF THE GAULS AND THE GERMANS

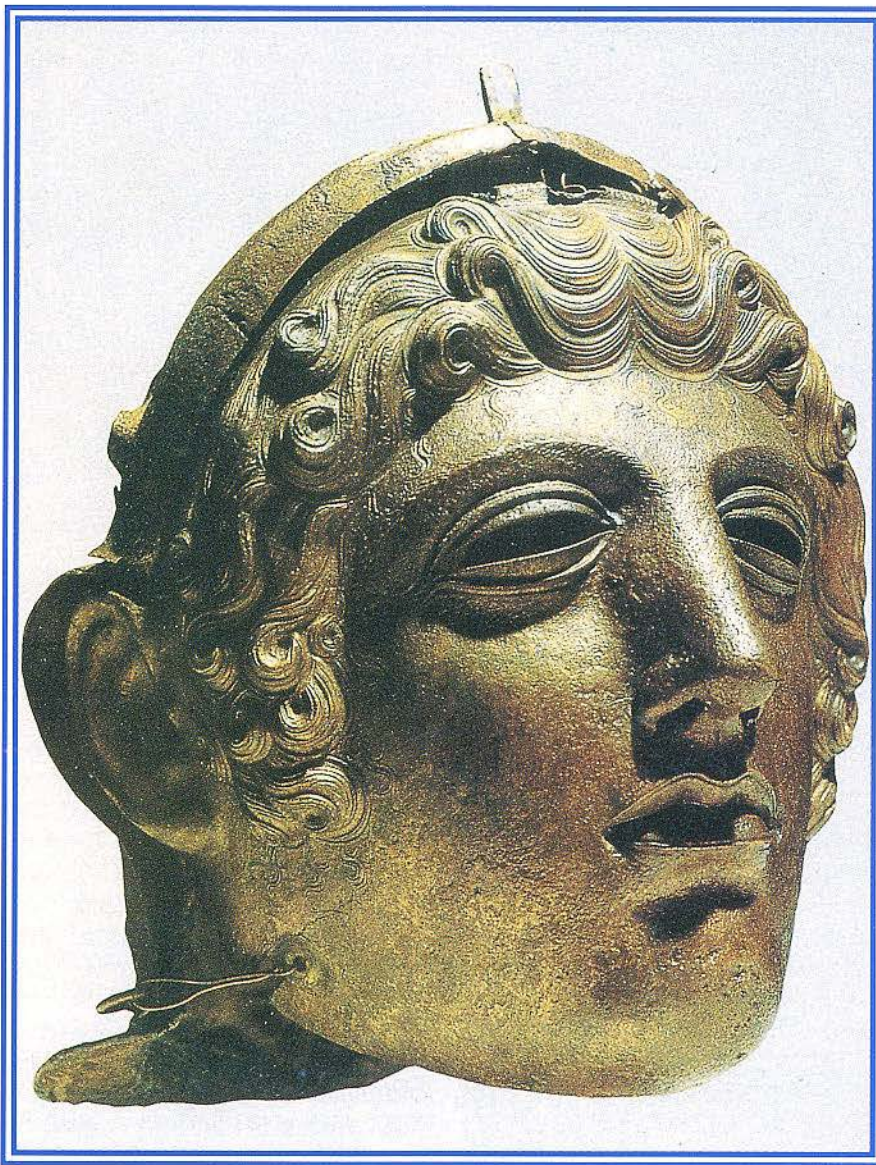
Also on the military plane, the beginning of Vespasian's rule was certainly not easy, because a Batavian chief, Julius Civilis, taking advantage of the Legions' critical situation, fomented a rebellion of the Germans and the Gauls against Rome. The revolt was quickly put down by the promptly reconstituted Roman army.

The rebellion was encouraged by the fact that the Auxiliaries were enrolled and employed in the same territories and were commanded by Leaders of the same extraction. With time, this had led to frictions between Auxiliaries and Legionaries and, in the specific case of Julius Civilis' revolt, many Auxiliaries had embraced the cause of the rebels, their fellow-countrymen.

To stop this, Vespasian adopted a measure by which the Auxiliaries were no more commanded by their Chiefs and had to serve in a Province different from that of their origin. Thus the powerful defensive system on the Rhine was rapidly reconstituted and the security towards the exterior reestablished.

THE JUDAIC REVOLT AND THE DESTRUCTION OF THE TEMPLE OF JERUSALEM

In the eastern regions the Judaic war was under way. Vespasian had conducted it, with alternate ups and downs, during the preceding years. When he was proclaimed Emperor, in 70 A.D., there remained only Jerusalem to be conquered and some fortresses to be subdued. This task was entrusted to his son, Titus. In the



together seven times. On a slightly lower level he placed his other son, Domitian. But, in substance, Vespasian exercised power in person, with a persevering and even-minded action which lasted all along his rule. The foundations of this state of balance were his relations with the Senate.

It was difficult to motivate a Senate that, during the preceding decades, had given so many proofs of ineffectiveness and weakness. Nevertheless Vespasian was able to strike the right note, helped also by the fact that within his Court and family there were never intrigues.

Conscious of the precarious situation of the Senate, weakened

by the strifes broken out during the preceding decades, he had a new "Lectio Senatus" effected and increased from 200 to 1000 the number of the families of the senatorial nobility, mostly of Italic and provincial origin.

He was the first to introduce Provincials among Patricians. The wisdom of this choice can be confirmed by a single name: M. Ulpian Trajan, of Spanish origin, a future great Emperor, the "Optimus".

Vespasian knew how to spur also the representatives of the Knights and the Freedmen, whose employment in administrative positions increased remarkably. These two orders were drawing towards a substantial parity, giving

summer of 70, the resistance of Jerusalem was overcome. Solomon's sacred Temple was sacked and destroyed, creating an irremediable hate between Romans and Jews. In 72 also the Masada fortress was conquered and all its defenders killed themselves.

The war between Judaea and Rome was, above all, a conflict between mentalities unable to understand each other; a conflict between the Judaic ideal of a State subordinate to the national religion and the Roman imperialism, in which religion was subordinate to the State. By destroying the Temple of Jerusalem, the Romans destroyed the political and religious centre of Judaism,

The Jewish leaders were brought to Rome as a trophy to be exhibited during the triumph. The Arch of Titus was erected on the Via Sacra. On the whole, almost one million Jews were killed and, from that moment, the few that had survived started to disperse through the whole of Europe, starting their diaspora.

THE REORGANIZATION OF FINANCES AND THE PUBLIC WORKS

Vespasian started his work by organizing the finances, where Nero's mad squandering had created great unbalances. The financial activity, was almost responsible for the characteristic mark attached to Vespasian's rule. Actually, the tax sector was only tidied up and the new taxes introduced were very few. One should not be misled by the famous tax on urine, introduced precisely by Vespasian.

He was extremely fastidious in this administrative reorganization and gave a whole series of detailed instructions aimed at obtaining the maximum possible savings. For example, he ordered that every delegation travelling on duty be composed of no more than three persons. His administration was so

correct and the control so effective that, during his reign, there were no Governors condemned for extortion.

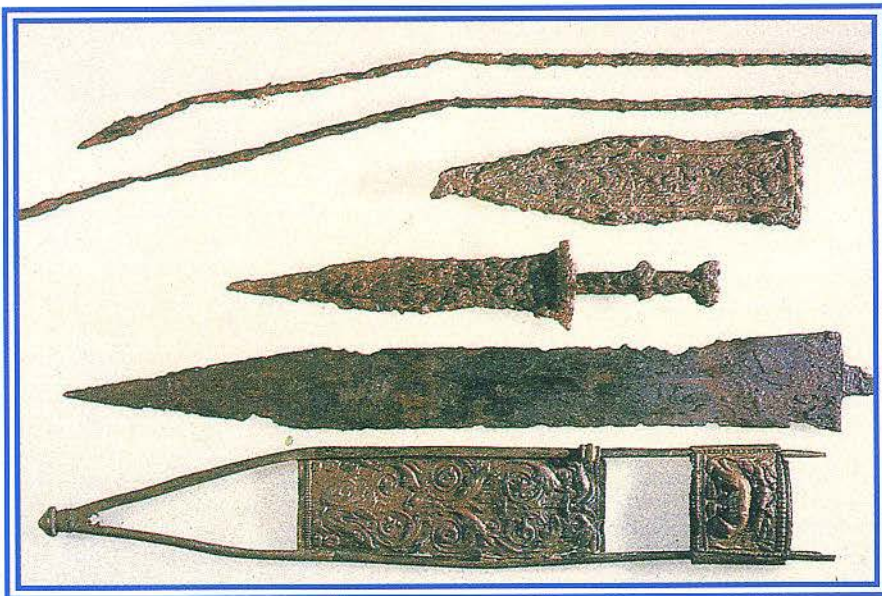
The only sector in which Vespasian permitted a certain financial liberality was that concerning works of public utility. He had the Capitoline temple and the temple of Vesta rebuilt. He laid the foundations of the Forum of Peace and launched a powerful programme of maintenance of the aqueducts. He built what, along the centuries in the collective representation, was going to be the symbol of Rome, the Colosseum or, more correctly, the Flavian Amphitheatre, which had three rows of superimposed arches (the last row, with its great rectangular windows, was built by Domitian, a few years later).

THE REORGANIZATION OF THE ARMY AND OF THE GOVERNMENT

Above this praiseworthy work of material restoration, there is the reorganization of the Army and of the government.

As regards the Army, the basic problem was to resume the control of the Legions. Vespasian succeeded in an excellent manner, so much so that 150 years had to

Roman arms found at several locations in England (1st Century A.D.).



elapse before the phenomena of anarchy that characterized the year 69 recurred again. The very renewal of the aristocracy brought the advantage of placing new men at the head of the military corps, men that had matured in long periods of service without favours and privileges.

The Army was less imbued with nobility, and careers were strongly marked by meritocracy and by long periods of command. For instance, Trajan, the future Emperor, served 10 years of actual military Tribune.

With Vespasian there occurred a certain distancing between the military and the political careers, thus even the city noblemen that stayed well away from the Army could make a career, as it happened with Nerva, who became Emperor despite his having never commanded a Legion.

We have already mentioned the changes in the recruitment and employment of the Auxiliaries. Another innovation introduced by Vespasian was a different defensive conception. Before, the defence of the frontiers was based on a limited number of massive concentrations of Legions. With

Vespasian, on the contrary, the forces were spaced along the whole defensive line.

The few powerful strongholds, where three or four Legions were concentrated, disappeared, lighter defensive installations were built and more diffuse forces stationed on the border line.

What had been once a field Army was being transformed into a garrison Army. The Legion was starting to lose its mobile character while there was an increasing habit of sending to other Provinces not entire Legions, like in Augustus' times, but only detachments of Legionaries (*Vexillationes*). With this began the institution of field troops distinct from the frontier troops.

Augustus' Legions had been mobile units, with simple quarters located along the important roads. With Vespasian, the forces were no more stationed on the main roads but on the strong-points of the border line. The deployment was more permanent and the *Castra* started to be made of stone, for a more lasting settlement.

Augustus' army was structured to act as a mass. Vespasian's new Army was inspired by a conception of advanced defence of the frontiers and was therefore more fragmented. The units which occupied the strongholds were joined by other mobile formations, trained for guerrilla and patrolling.

In substance, there were no reserves because it was thought that good communications would facilitate the transfer of troops to the various sectors of the frontier.

With Vespasian's reorganization, the Roman "*Limes*" became a reality. The "*Limes*" was a border line, clearly marked on the ground with all the defensive deployments, the in-flow and connection routes which, as a whole, formed a tangible and concrete barrier which separated the world of civilization from the barbarous regions of the exterior. The sword was replaced by the plough.

Vespasian was the first Emperor, after Tiberius, who had a solid



experience in military problems. He shunned every dogmatism, preferring simple and clear things. The Legions that had misbehaved during the civil war were disbanded or fused with others.

On the whole, the measures taken by Vespasian, although not

so remarkable, permitted to build an Army more disciplined, better commanded and with a high degree of efficiency.

After the Batavian and Judaeen wars, for many years the Roman forces did not have to face situations of such gravity. They

Facing page.

Stele of M. Flavonius Facilis, centurion of the XX Legio. In his right hand he holds the "vitis", a symbol of his authority (Colchester, England, 1st Century A.D.).

Right.

A Knight's bronze helm (Cambridgeshire, England, 1st Century A.D.).

were engaged in reinforcing their presence on the defensive line they had reached, especially in Britannia, where they completed the conquest of Wales. The idea of attempting an expedition to Ireland was only entertained briefly.

The defence on the Rhine was improved by placing on the right bank a series of strongholds of auxiliary troops, which were connected by forts in which larger units were deployed.

As regards the reorganization of the government, while the Senate's nobility continued to supply the highest collaborators to the Prince, there was an increase, in number and importance, of the officials coming from the equestrian order.

Vespasian's governing action spread with equal intensity in every province. After Augustus and Tiberius, for the first time, the provincial world had a Prince that knew almost all of it from direct experience. In the long years of service, Vespasian had actually stayed in all the Provinces of his realm. He certainly availed himself of this direct experience and knowledge for his reforms.

On the juridical plane, he got rid of the proceedings for lese-majesty, which had done so much harm already since Tiberius' period.

His Generals and Governors eventually formed a new career aristocracy. He gained the loyalty and the cooperation of his subjects, imposing himself for the value of his example, because he did not save his energies and was very active.

He was adverse to the cult for his person and strict in excluding his family from excessive honours. On the other hand, he was very aware of



the political value of the imperial cult.

HIS DEATH

His death came unexpected. He had gone for a cure at the thermal baths of Cotilia, near Rieti, and he died there, on the 23rd of June of 79. He was 69 and had ruled for nine years.

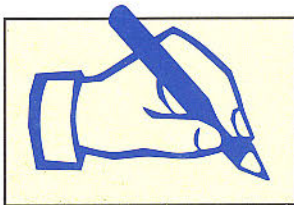
At the moment of his death, he got up from his bed and said: "*the Emperor dies standing*". He had been an upright Emperor. He did not possess Caesar's brilliant mind or Octavian's farseeing shrewdness but had a lot of common sense, moral rectitude and personal austerity. Exactly what Rome

needed after the many dark decades from which Vespasian, an excellent Roman Emperor, had emerged.

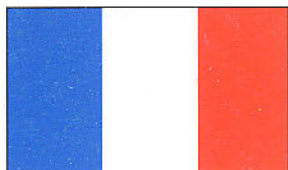
Among his predecessors he admired Augustus, to whom he resembled in many aspects. It is significant that he had his amphitheatre (the Colosseum) erected precisely where Augustus wanted to build it. In imitation of Augustus, he had made "peace and order" his motto. Therefore, for all these reasons, he deserves to take his place among the best Emperors.

□

** Major General,
Chief, 4th Division
DGS*



SOMMAIRE INHALT RESUMEN



La contribution des Forces Armées italiennes dans le cadre du procès de sécurité visant à la construction de l'unité européenne (p. 2).

L'armée de terre italienne est fortement engagée dans un processus organique de transformation pour la création d'un instrument agile, flexible, susceptible d'être rapidement déployé dans le cadre d'opérations de soutien à la paix, dans la perspective de répondre de façon efficace aux exigences de la communauté internationale et de contribuer activement à la construction d'une défense intégrée authentique.

L'armée de terre du nouveau siècle. Point de situation (p. 10).

L'article fournit un tableau ponctuel de l'effort en cours visant à la réorganisation structurelle et opérationnelle de l'instrument militaire terrestre. On y décrit en particulier les changements en cours dans les secteurs de la doctrine, de l'organisation, des forces opérationnelles et de la logistique de la nouvelle armée de terre.

Une Armée de Terre pour l'Europe, par Claudio Graziano (p. 22).

La récente conférence au sommet du Conseil d'Europe, qu'il y a eue l'année passée à Helsinki, a réaffirmé l'envie de constituer une commune défense de notre continent. Dans ce cadre, l'Armée de Terre italienne est appelée à faire des nouveaux et difficiles efforts de réorganisation de la structure et d'adaptation à la nouvelle «idée opérationnelle» prévoyant une Division pour l'Europe, fondée sur neuf ensembles de forces à niveau de Brigade, dont un de ceux-là qui a la capacité de Commandement et Contrôle, plus les nécessaires supports spécialistes et logistiques.

Les Balcons. L'Italie en première ligne, par Pier Paolo Lunelli (p. 38).

Cet article décrit les éléments plus importants des opérations que l'Armée de Terre italienne a fait dans les Balcons pendant le printemps et l'été du 1999. Une année sans précédent, pour ce qui concerne son emploi militaire, depuis la fin de la Deuxième Guerre Mondiale.

L'arme nucléaire. Conçus et preconçus, par Maurizio Coccia (p. 54).

Avec la fin du bipolarisme l'arme nucléaire, de pure facteur de dissuasion,

maintenant est en train de jouer un rôle plus complexe, qui entraîne des équilibres nationales et internationales. Le nombre des Pays qui ont des bombes nucléaires est en train de se multiplier et ça justifie le maintien d'un arsenal atomique, de la part des États-Unis, capable de décourager des potentielles menaces à la sûreté générale. Dans ce nouveau «panorama» internationale, l'Europe cherche une espace justement à côté du grand allié américain, par contribuer à la paix, au progrès et au bien-être collectif.

Roumanie. La nouvelle Armée de Terre. Entrevue au Chef d'État Major de l'Armée de Terre, Général de Division Mihail Popescu, par Enrico Magnani (p. 62).

La participation roumaine à des opérations de «Peace Keeping», à côté des Pays de l'OTAN, a eu d'importantes répercussions sur la doctrine d'emploi. On est désormais en acte un processus de restructuration de l'Armée de Terre, qu'entre 2003 et 2010 préverra la suppression de structures, la contraction des forces, l'adoption de «standards» de l'instruction militaire mises à jour et l'acquisition de nouveaux équipements et de modernes systèmes d'arme. La tendance vers une Armée de Terre composée par des soldats professionnels est présente aussi en Roumanie, où la population est favorable à l'entrée des femmes à la carrière militaire.

Timor Est. Les italiens dans l'île fantôme, par Salvatore Capochiani (p. 68).

Les orribles violences faites par des bandes de miliciens pro-indonésiens à la population de Timor Est, qui a réclamé sa propre indépendance après un plébiscitaire referendum, ont déterminé l'emploi des parachutistes de la «Folgore» dans une difficile mission de paix, en provoquant un soudain intérêt pour une région, lointaine de milliers de kilomètres. Cet article en trace le profil historique, géographique, culturel et politique, dans l'intention d'individualiser les raisons d'une tragédie ignorée pour 23 longs ans.

Sur les routes du pétrole, par Ornella Rota (p. 76).

L'aire du Golfe constitue un point névralgique pour l'économie mondiale. Arabie Saoudite, Kuwaït, Oman, Bahreïn, Émirats Arabes Unis et Qatar ont pour cette raison constitué un Conseil de Coopération du Golfe (C.C.G.), pour aborder des problèmes concernant la défense, l'économie et la politique du territoire, en soulignant en particulier les rapports internationaux. Pendant le dernier décennie les Pays du C.C.G. sont devenus plus étroitement liés aux États-

Unis et à l'UEO. Cette aire est devenue de très grande intérêt stratégique pour l'Occident.

La «Logistique intégrée» dans la gestion des matériaux dans l'Armée de Terre, par Francesco Zinno (p. 82).

Parmi les objectifs du processus de restructuration de l'Armée de Terre il y en a deux qu'on pourrait définir de type d'«entreprise»: la réduction des prix fixes et l'augmentation d'efficacité. On peut poursuivre ce but en appliquant, avec les nécessaires adaptations, des principes de la «logistique intégrée», auxquels les modernes stratégies de gestion d'entreprise s'inspirent. L'organisation doit se fonder sur le «core business» et sur les possibles synergies parmi des sujets différents de la chaîne fonctionnelle. Dans ce but il est nécessaire de décentraliser aux niveaux périphériques des fonctions exécutives des approvisionnements et des provisions, en tenant compte de leur capacité de répondre, dans une optique de «just in time», aux exigences des usagers.

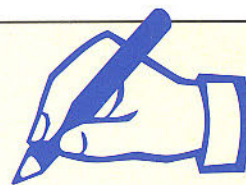
Tibère, par Carmine Fiore (p. 92).

Tibère passa une grande partie de sa vie à l'ombre d'Auguste, son beau-père et puis, son beau-papa. Loyal et discipliné, il se révéla un excellent condottiere et contribua à étendre les limites de l'Empire jusqu'à la Pannonie (Roumanie). À la mort d'Auguste, à 56 ans, il gagna la reconnaissance formelle d'Empereur. À une première profitable période de maladroites et troublées années de gouvernement du volontaire exil dans l'île de Capri suivirent. À sa déterminée et prudente politique extérieure et à sa sage et juste administration des provinces on est suivie la tyrannie vers la ville de Rome. Tibère mourut à 78 ans, après 22 ans de principauté.

Les Empererirs romains: Titus Flavius Vespasien, par Carmine Fiore (p. 102).

Après les premiers trois Empereurs de la famille Claude (Caligula, Claude et Néron), qui ont donné à Rome trois années d'événements pénibles, Titus Flavius Vespasien, qui a hérité un empire étant en train de se débander, a été couronné Empereur. Pendant les neuf ans de sa «principauté» il est réussi, à niveau militaire et à niveau des réalisations administratives et civiques, à accomplir une oeuvre de radical reconstitution de l'État. L'histoire Lui donne le grand honneur d'avoir réorganisé les finances, d'avoir donné une grande impulsion à l'urbanisme et d'avoir restructuré l'ordonnement des Legions. Il mérite, pour cette raison, d'être inclus entre les meilleurs Empereurs.

SOMMAIRE INHALT RESUMEN



Der Beitrag der italienischen Streitkräfte zum Sicherheitsprozess im Rahmen der Bildung der europäischen Einheit (s. 2).
Ein tiefgehender organischer Umstrukturierungsprozess hinsichtlich der Schaffung eines schlanken und flexiblen militärischen Instruments, das sofort in Friedensunterstützungsoperationen eingesetzt werden kann, wurde vom italienischen Heer angebahnt, in der Perspektive, wirkungsvoll den Anforderungen der internationalen Gemeinschaft gerecht zu werden und aktiv zur Bildung einer wirklichen integrierten Verteidigung beitragen zu können.

Das Heer des neuen Jahrhunderts. Situationspunkt (s. 10).
Der Artikel bietet eine genaue Analyse der Bemühungen unserer Streitkraft hinsichtlich ihrer strukturellen und operativen Umstrukturierung. Es werden im einzelnen die Veränderungen im Bereich der Einsatzgrundsätze, der Organisation, der Einsatzkräfte und der Logistik des neuen Heeres beschrieben.

Streitkräfte für Europa, von Claudio Graziano (s. 22).
Auf dem Gipfel des Europarats im vergangenen Jahr in Helsinki wurde wiederum der Wille zu einer gemeinsamen Verteidigung Europas bekräftigt. In diesem Zusammenhang ist das italienische Heer zu neuen, einschneidenden Strukturformen aufgefordert, um sich dem «neuen operativen Konzept» anzupassen. Dieses sieht eine Division für Europa vor, die sich um neun Formationen in Brigadestärke gruppiert, von denen eine Kommando- und Kontrollbefugnis hat, mit der entsprechend notwendigen Unterstützung durch Spezial- und Logistikeinheiten.

Der Balkan. Italien in Vordester Linie, von Pier Paolo Lunelli (s. 38).
Der Artikel beschreibt die wichtigsten Aspekte der im Frühjahr-Sommer 1999 von den italienischen Streitkräften auf dem Balkan durchgeführten Operationen. Nie seit dem zweiten Weltkrieg hat es einen Einsatz in diesem Umfang gegeben.

Die Atomwaffe. Konzepte und Vorurteile, von Maurizio Coccia (s. 54).
Mit dem Ende der bipolaren Weltordnung hat die Atomwaffe von einer reinen

Abschreckungsfunktion zu einer komplexeren Rolle gefunden, die regionale und internationale Gleichgewichte beeinflusst. Die rasche Vermehrung von Ländern, die im Besitz von Nuklearwaffen sind, rechtfertigt (entgegen anderslautenden Äußerungen) die Beibehaltung seitens der USA eines Atomarsenals, das in der Lage ist, potenzielle Bedrohungen der allgemeinen Sicherheit wirksam abzuschrecken. In diesem neuen internationalen Kontext sucht Europa einen Platz an der Seite des amerikanischen Verbündeten, mit dem Ziel, zum Frieden, zum Fortschritt und zum Gemeinwohl beizutragen.

Rumänien. Das neue Heer. Interview mit dem Heeresstabschef Divisionsgeneral Mihail Popescu, geführt von Enrico Magnani (s. 62).
Die Teilnahme Rumäniens an peacekeeping-Operationen Seite an Seite mit NATO-Ländern, hat wichtige Auswirkungen auf die Einsatzdoktrin seiner Streitkräfte gehabt. Inzwischen ist ein Prozess der Umstrukturierung im Gange, der zwischen 2003 und 2010 die Auflösung bestimmter Strukturen, die Verminderung der Streitkräfte, die Einführung von Ausbildungsstandards, die dem neuesten Stand entsprechen, sowie den Erwerb neuer Ausrüstung und moderner Waffensysteme mit sich bringt. Die Neigung zu einer reinen Berufsarmee ist auch in Rumänien vorhanden, wo man den Zugang von Frauen zur Soldatenlaufbahn mit Wohlwollen betrachtet.

Osttimor. Die Italiener auf der «Geister-Insel», von Salvatore Capochiani (s. 68).
Die schrecklichen Grausamkeiten, die von indonesiennahen Milizbanden an der Bevölkerung Osttimors verübt wurden, welche die Unabhängigkeit bei einer Volksabstimmung verlangt hatte, hat zum Einsatz der Fallschirmspringer der (italienischen Eliteeinheit) Folgore in einer schwierigen Friedensmission und zu einem plötzlichen Interesse an dieser sehr weit entfernt liegenden Region geführt. Der Aufsatz liefert ein historisches, geographisches, kulturelles und politisches Profil, in der Absicht, die Ursachen einer Tragödie aufzuzeigen, die seit 23 langen Jahren anhält.

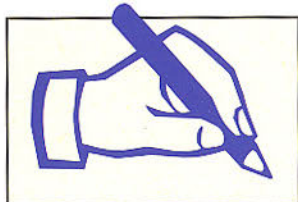
Auf den Wegen des Erdöls, von Ornella Rota (s. 76).
Die Golfregion ist ein kritisches Gebiet für die Weltwirtschaft. Daher haben Saudi-Arabien, Kuwait, Oman, Bahrain, die Vereinigten Arabischen Emirate und Qatar den Golfkooperationsrat ins Leben gerufen, um Probleme, die die Verteidigung, Territorialökonomie und -politik betreffen, in Angriff zu nehmen, indem sie besonders wert auf die internationalen Beziehungen

legen. Im vergangenen Jahrzehnt sind die Beziehungen der Länder des Golfkooperationsrates mit den USA und der EU enger geworden. Die Region ist in der Tat für den Westen von wichtiger strategischer Bedeutung.

Die «integrierte Logistik» in der Materialverwaltung der Streitkräfte, von Francesco Zinno (s. 82).
Unter den Zielen des Neugliederungsprozesses der Streitkräfte gibt es zwei, die man «unternehmerisch» nennen könnte: die Reduktion der Fixkosten und die Erhöhung der Effizienz. Diese Ziele können erreicht werden, indem man, mit den notwendigen Modifizierungen, einige Prinzipien «integrierter Logistik» anwendet, an denen sich moderne Unternehmensführungsstrategien orientieren. Die Organisation muss auf dem core business und auf möglichen Synergien zwischen unterschiedlichen Teilen der Funktionskette fußen. Dazu ist es sinnvoll, einige Ausführungsaufgaben der Versorgung und der Verproviantierung in einige Aussenstellen zu dezentralisieren, wobei gebührend deren Bereitstellungsfähigkeit angesichts einer zukünftigen just in time-Perspektive zu bedenken ist.

Tiberius, von Carmine Fiore (s. 92).
Tiberius verbrachte einen Grossteil seines Lebens im Schatten von Augustus, seinem Stief- und dann Schwiegervater. Loyal und diszipliniert, wies er sich als hervorragender Feldherr aus und trug dazu bei, die Grenzen des Römischen Reiches bis nach Pannonien (das heutige Ungarn) auszuweiten. Beim Tod von Augustus, erhielt er 56-jährig die Kaiserwürde. Einer ersten, fruchtbaren Phase folgten mittelmäßige und trübe Regierungsjahre aus dem freiwilligen Exil auf Capri. Der entschlossenen und umsichtigen Aussenpolitik und der weisen und korrekten Verwaltung der Provinzen gesellte sich die Tyrannei der Stadt Rom gegenüber hinzu. Er starb 78-jährig, nach 22 Jahren des Prinzipats.

Die Römischen Kaiser: Titus Flavius Vespasianus, von Carmine Fiore (s. 102).
Nach den ersten drei Kaisern der claudischen Familie (Caligula, Claudius und Nero), die Rom nach ihrem Ableben drei unruhige Jahre bescherten, wurde Titus Flavius Vespasian zum Kaiser gekrönt, der ein Reich in Auflösung übernahm. In den neun Jahren seiner Herrschaft («Prinzipat») gelang es ihm, auf militärischem wie auf zivilem und verwaltungstechnischem Gebiet, ein großes Werk der radikalen Neuordnung des Staates zu schaffen. Vor der Geschichte wird ihm der große



SOMMAIRE INHALT RESUMEN

Verdienst eingeräumt, die Finanzen geordnet, der urbanistischen Ausgestaltung der Stadt große Impulse verliehen und die Legionen neu geordnet zu haben. Er verdient es also, in die Reihe der besten Kaiser eingereiht zu werden.



La contribución de las Fuerzas Armadas al proceso de seguridad en la construcción de la unidad europea (p. 2).

El Ejército italiano está muy comprometido en un orgánico proceso de transformación para la creación de un instrumento ágil, flexible y que se pueda emplear en apoyo a las operaciones de paz. Todo esto en la perspectiva de responder eficazmente a las llamadas de la comunidad internacional y participar activamente en la construcción de una auténtica defensa integrada.

La situación del Ejército del año 2000 (p. 10).

El artículo proporciona un análisis puntual del esfuerzo que se está llevando adelante para la reorganización estructural y operativa del instrumento militar terrestre. Se describen de manera más pormenorizada los cambios en los sectores de la doctrina, del ordenamiento, de las fuerzas y de la logística del nuevo ejército.

Un Ejército para Europa, de Claudio Graziano (p. 22).

El último encuentro del Consejo de Europa del año pasado en Helsinki, confirmó de nuevo la voluntad de constituir una defensa continental común. Por eso se llamó al Ejército italiano por nuevos esfuerzos que empeñan para la reorganización estructural y de adaptación al nuevo «concepto operativo» que prevee una División por Europa, basada en nueve complejos de fuerzas en nivel Brigada, de las que uno con capacidad de Mando y Control, más los necesarios soportes especializados y logísticos.

Balcánicos. Italia en primera línea, de Pier Paolo Lunelli (p. 38).

El artículo habla de los elementos más importantes de las operaciones desarrolladas en la primavera-verano de 1999 por el Ejército italiano en los Balcanes. Un año como ningún otro, por el empeño militar, de la fin del

segundo posguerra.

El arma nuclear. Conceptos y preconcepciones, de Maurizio Coccia (p. 54).

Con la fin del bipolarismo el arma nuclear, de simple factor de deterrence ha tomado un rol más complejo que pone en juego equilibrios regionales y internacionales. El multiplicarse de los Países que tienen armas nucleares justifica la posesión por los Estados Unidos de un arsenal atómico capaz de desconfiar potentes amenazas por la seguridad general. En este nuevo contexto internacional Europa está buscando su mismo lugar cerca del aliado americano, para contribuir a la paz, a la progresión y al bienestar de todos.

Románia. El nuevo Ejército. Entrevista al Jefe de Estado Mayor del Ejército, General de División Mihail Popescu, de Enrico Magnani (p. 62).

La participación romana a las operaciones de «Peace Keeping», al lado de los Países de OTAN, tuvo importantes repercusiones para la doctrina empleada. Se puso en acto un proceso de reestructuración del Ejército, que entre el 2003 y el 2010, prevee la supresión de estructuras, la contracción de las fuerzas, la adopción de «standards» de adiestramiento y la adquisición de nuevos equipajes y modernos sistemas de arma. La tendencia hacia un ejército de profesionistas está presente también en Románia donde se mira favorablemente a la entrada de las mujeres en el servicio militar.

Timor Est. Los italianos en la isla fantasma, de Salvatore Capochiani (p. 68).

Las horribles violencias por bandas de militantes filioindonesios hacia la población de Timor Est que proclamó su independencia después de un plebiscitario referendium, determinó el empleo de los paracaidistas de la «Folgore», en una difícil misión de paz despertando el interés por una región lejana muchos kms. El artículo traza el perfil histórico, geográfico, cultural y político, para individualizar las razones de una tragedia ignorada por 23 años.

Por las rutas del petróleo, de Ornella Rota (p. 76).

La zona del Golfo constituye un punto nevrálgico por la economía mundial. Arabia Saudita, Kuwait, Oman, Bahrein, Emiratos Árabes Unidos y Qatar formaron un Consejo de Cooperación del Golfo (C.C.G.) para resolver problemas de defensa, economía y política de sus territorios, dando más importancia en particular a los reportes

internacionales. En los últimos diez años las relaciones de los Países de C.C.G. con los Estados Unidos y con UEO se hicieron más cerradas. La zona por eso adquirió un vital interés estratégico por el Occidente.

La «logística integrada» en la gestión de los materiales del Ejército, de Francesco Zinno (p. 82).

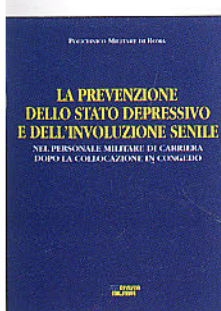
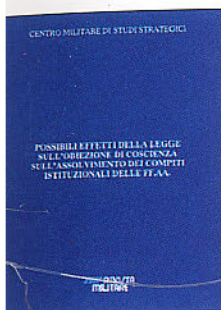
Entre los fines del proceso de reestructuración del Ejército hay dos que los se pueden definir de tipo «empresarial»: el rebajo de los precios fijos y la elevación de eficiencia. Se puede llegar al fin empleando, con los necesarios adaptamientos, algunos principios de la «logística integrada» a los que quieren llegar las modernas estrategias de gestión empresarial. La organización se tiene que basar en el «core business» y en las posibles sinergias entre sujetos diferentes de la cadena funcional. Por ese fin es necesario desplazar a los niveles periféricos algunas funciones ejecutivas de los aprovisionamientos y reforminientos teniendo en cuenta su capacidad de contestar las exigencias del utente.

Tiberio, de Carmine Fiore (p. 92).

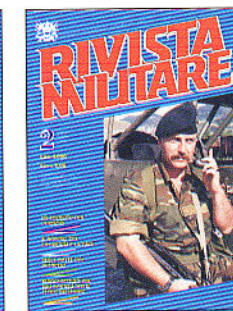
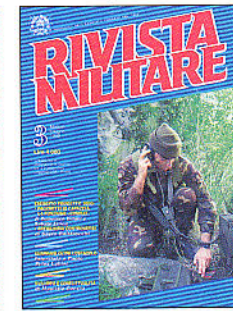
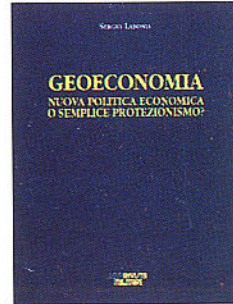
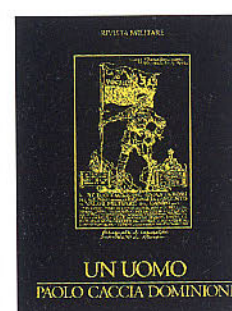
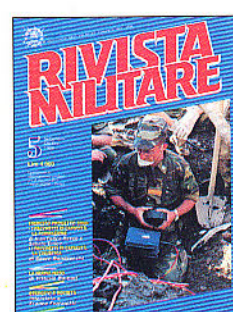
Tiberio vivió por la mayoría bajo la sombra de Augusto, su padrastro y después su suegro. Leal y disciplinado, se volvió a optimo conductor y ayudó a la extensión de los confines del Imperio hasta la Pannónia (Románia). Con la muerte de Augusto, a la edad de 56 años, obtuvo el reconocimiento formal de Imperador. A un primero y provechoso período siguieron mediocres y turbios años de gobierno al voluntario exilio en Capri. A la determinada y prudente política del exterior y a la sabia y correcta administración de las provincias se acompañó la tiranía respecto a la ciudad de Roma. Se murió a los 78 años, después de 22 años de principado.

Los Emperadores romanos: Tito Flavio Vespasiano, de Carmine Fiore (p. 102).

Después de los primeros tres Emperadores de la familia Claudia (Caligula, Claudio y Nerón) que hicieron vivir a Roma tres años de eventos penosos, fue coronado Emperador Tito Flavio Vespasiano, que heredó un imperio descarrado. En los nueve años de su «principado» cumplió, militarmente y administrativamente, una obra radical reorganización del Estado. La historia le atribuye el grande mérito de haber reordenado las finanzas, de haber dado un gran impulso a la urbanística y a la reestructuración del ordenamiento de las Legiones. Merece, por eso, de tomar un lugar entre los mejores Emperadores.



THE EDITORIAL STYLE OF RIVISTA MILITARE



RIVISTA MILITARE

JOURNAL OF THE ITALIAN ARMY FOUNDED IN 1856





JOURNAL OF THE ITALIAN ARMY FOUNDED IN 1856

RIVISTA MILITARE

2 MAY
JUNE
JULY
AUGUST
2000

Lire 4.000

Euro 2,06

Spedizione in
abbonamento postale
comma 34 art. 2
L. 549/95 Roma

**THE ARMY FOR EUROPE
AND FOR THE COUNTRY**

**WEAPONS OF MASS
DESTRUCTION**

**THE PARAMETERS
OF POWER**

THE ATLANTIC ALLIANCE



ENGLISH EDITION



Rivista Militare
is on INTERNET

Official site

www.esercito.difesa.it



On May 4, in Naples, the Italian Army celebrated its birthday. For 139 years, in war and peacetime, our Service has been playing a leading role as an element of cultural, civil, social and democratic growth of the Nation.

FOUR-MONTHLY

Supplement to numbers 3 and 4 of Rivista Militare Italian Edition

Editor in Chief:
Giovanni CERBO

Management and Editorial Office

Via di S. Marco
00186 Rome
Phone 0039 0647357373
Advertising

Care of the Secretariat
of Rivista Militare
Phone 0039 066795027
Printer
Fotolito Moggio
Strada Galli snc
Villa Adriana - Tivoli

Photoprocessing

Studio Lodoli
Phone 0039 065898780

Subscription and forwarding

By mail
Law 662/96, art. 2, para 20/c
Conditions for 2000:
One number: Lit. 4,000 - Euro 2,06
One back number: Lit. 8,000 - Euro 4,12
Subscription rates
Italy: Lire 22,000 a year
Abroad: Lire 30,000 a year
Payment must be made on postal
account No. 22521009 - SME
Centro pubblicitaria dell'Esercito
123/A, Via XX Settembre - Rome
Residents abroad may remit
payment through bank cheque or
international postal order

Authorized by the Court of Rome
under No. 944 of the Registry by
Decree 7-6-1949

2000

© Copyright by
Rivista Militare



ASSOCIATED TO USPI
UNIONE STAMPA
PERIODICA ITALIANA

The production of this magazine
has been supervised
by Omero Rampa

CONTENTS



Number Two 2000

May - June

July - August

Rivista Militare aims at broadening and updating the technical and vocational training of Officers and NCOs. It is thus a means of propagating the military way of thinking and a forum of study and debate. Through the publication of articles of technical and scientific interest, Rivista Militare also aims at informing the general public on the Army and on military issues.

Politics, Economics and Strategy

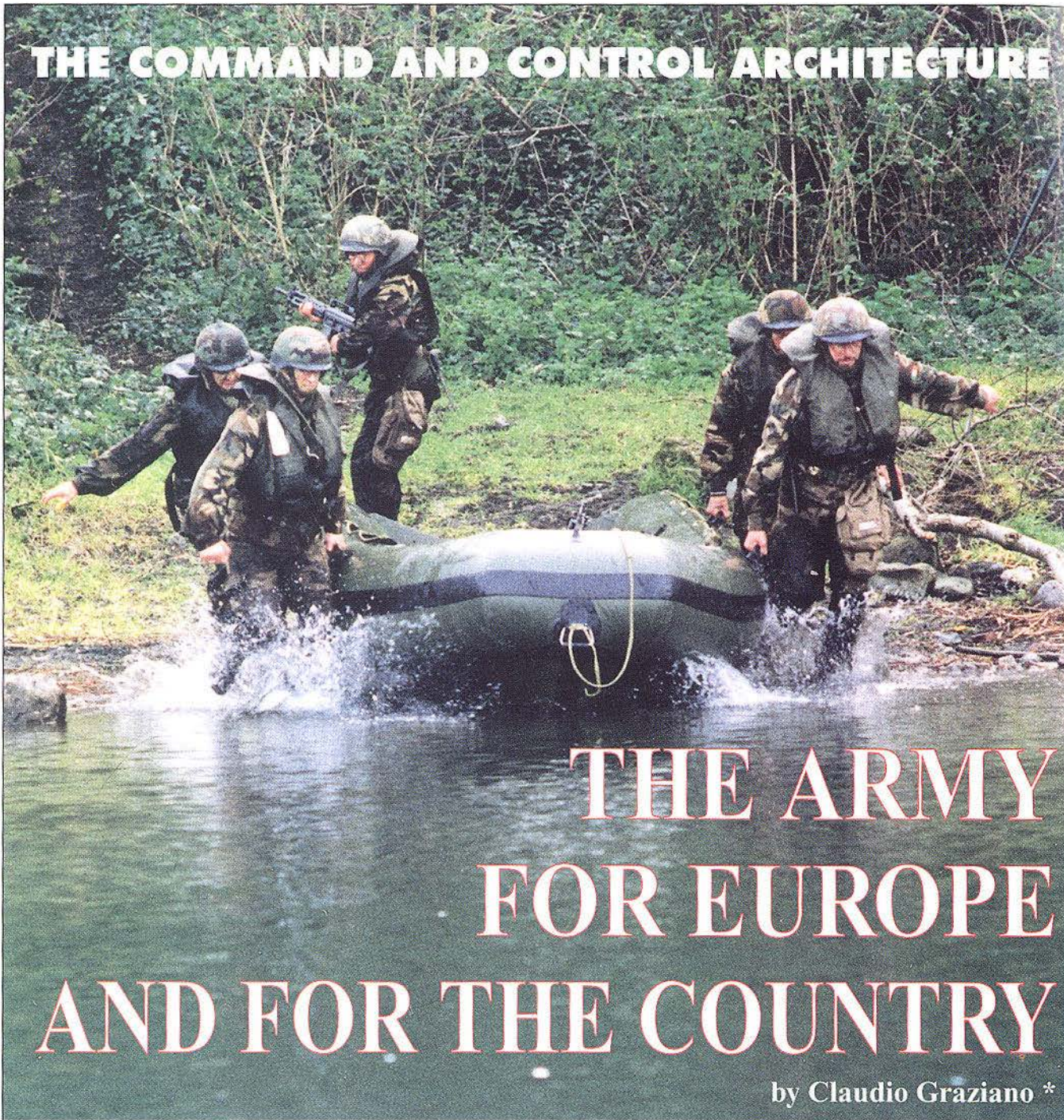
- 2 **The Army for Europe and for the Country**
The Command and Control Architecture
(Claudio Graziano)
- 20 **The New Frontier of the Army. Multinational Forces**
(Giorgio Cuzzelli)
- 32 **Weapons of Mass Destruction at the End of the 20th Century**
(Luigi Semprini)
- 44 **The Parameters of Power**
(Vittorio Barbati)
- 52 **Adaptation of the Treaty on Conventional Armed Forces in Europe (CFE)**
(Maurizio Boni)
- 60 **The Atlantic Alliance. A Look at the Future**
(Giuseppe Santangelo)
- 68 **Austria. The New Armed Forces**
Interview with the Chief of Staff of Defence
(Enrico Magnani)
- 74 **Sweden. The New Armed Forces**
Interview with the Supreme Commander of the Armed Forces
(Enrico Magnani)



Science, Technology and Training

- 80 **Less Foreseeable Lines and Relevant Methods**
(Giovanni Semeraro)
- 88 **Simulation and Combat Training Centres**
(Fabrizio Castagnetti)
- 94 **Roman Emperors. Marcus Ulpius Trajan**
(Carmine Fiore)
- 106 **Roman Emperors. Marcus Aurelius**
(Carmine Fiore)
- 213 **Sommaire - Inhalt - Resumen**

Instructions for Contributors: Anyone may contribute. To guarantee the highest objectivity of information, Rivista Militare leaves contributors ample freedom, though it does not necessarily share their opinions. The Author is thus solely responsible for the articles which, published unedited and without editorial ties, exclusively reflect his personal ideas. Articles must be original in thought and should not exceed ten typewritten pages. Once the Author receives his fee, he loses all exclusive rights. Rivista Militare may then pass the article on to other publications and EMPA (European Military Press Association) periodicals. Articles should be accompanied by suitable photographs, illustrations, explanatory tables, together with a photograph of the Author, a brief «curriculum vitae» and a ten-line-typewritten summary. Rivista Militare reserves the right to change the title of articles and choose the typeface deemed most suitable. Rivista Militare is equipped with a computerized system for phototypesetting and videopaging. In order to make the production of the articles more expeditious, it is desirable that the Authors provide, besides the text on paper, also the diskette with the text files of the article. Any system and type of computer can be used.



THE COMMAND AND CONTROL ARCHITECTURE

THE ARMY FOR EUROPE AND FOR THE COUNTRY

by Claudio Graziano *

In the preceding article (1) we focused our attention on the development of ESDI (2) and PESC (3), as far as it directly concerned the Army, with specific reference to the dimensional consequences, or requirements, on the land instrument, outlining with good approximation the minimum and indispensable operational dimensions that must be granted to the national land

forces in order to meet the Country's security requirements connected with the participation in the project of collective security in Europe.

The issue is the "Division for Europe", i.e. the organizational response given by the national planning to the new challenges of global security in the European and extra-European areas. To achieve this, we need two projectable

Command capabilities for the management of Division-level units, also multinational, nine complete combat Brigades, capable of operating autonomously in an independent theatre as well as tactical and logistic supports quantitatively and qualitatively adequate to sustain the combat units. These forces, permitting a four-shift rotation on two theatres and the support of other minor

The operational forces' Command and Control organization has proved to be an essential element in all the missions carried out during the last ten years for the prevention of conflicts and the promotion of international security. Therefore, this is the direction where we can find the solutions capable of providing the integration needed for the development of the European Security and Defence Identity (ESDI). It is essential to start an objective review of the new requirements, considering them in the light of the present situation, and then courageously make the necessary choices, crucial for our military instrument.



theatres (an example are the present two main theatres in the Balkans and the two simultaneous ones in Albania and Timor) are in line with the Italian Army's operational concept as regards the operations of international security, in terms of maximum operational effort (4).

As a whole, these formations correspond both to the national units available as a contribution to the EU's Force for the European-led management of crises and to the sum of the present Projection-Reaction forces, as well as to the future minimum operational requirements of an entirely professional Army. In other terms, by taking advantage of the acquired - or soon to be acquired - capabilities, deriving from the "Division for Europe" concept, the Italian Army can participate in the Eurocorps with initial forces equal to two Division Headquarters plus supports, sustainable for an indetermined length of time, or with an even larger initial pool, but for a limited time and with no possibility of meeting further

possible needs. As an alternative the Army could meet the NATO engagements, for Art.5 and non-Article 5 missions, with the reaction forces earmarked for the Alliance.

It must be also underlined that the number of 9 Brigades refers to the concept of "Standard Brigade" (5), and not to the total number of units envisaged by the establishment charts. Therefore, this number could be higher, considering that some Brigade-level units are "force basins" with no projection capability.

This is the situation of the British Army, where some Divisions and Brigades keep their name, perform merely territorial tasks and include also some manoeuvre units, which they hand over to the "real" Brigades in case of need. It is also the case, not too far away, of the Gulf War, where the UK Division included six armoured Brigades with six armoured manoeuvre-battalions, plus an equal number of motorized-infantry battalions for the defence of the REAR and,



Left.
An Italian Check Point in Sarajevo.

Facing page.
Patrolling activity in the village of Dili, East Timor.

understood, it seems appropriate to discuss the Command-and-Control capabilities at levels higher than Brigade, which are necessary to carry out "project Europe".

LEVELS OF COMMAND AND CONTROL CAPABILITY

Conceptual analysis

As is known, the present chain of command of the forces envisages:

- a first operational command of the forces: (COMFOTER);
- a second tactical level: the Intermediate Operational Commands. In particular, two Intermediate Commands must acquire projection capabilities (which they already have in part). The other two are entrusted with the conduct of operations connected with territorial defence (FOD);
- a third tactical level: Brigade Headquarters.

The establishment of this command architecture has been a fundamental step in the transformation of the Italian Army into a "producer of forces" ready to assume the new missions of collective security, ensuring the unitary character of the intents and supporting the introduction of the "task organization" concept (7). In this picture, the Intermediate Projection-Commands take on a particular importance, since they are flexible and modular structures, designated for the control of variable-dimensions, non-predefined, mission-tailored operational forces. Thus they are not Divisions, but rather architectures capable of projecting complete division-level C2 capabilities if and when required.

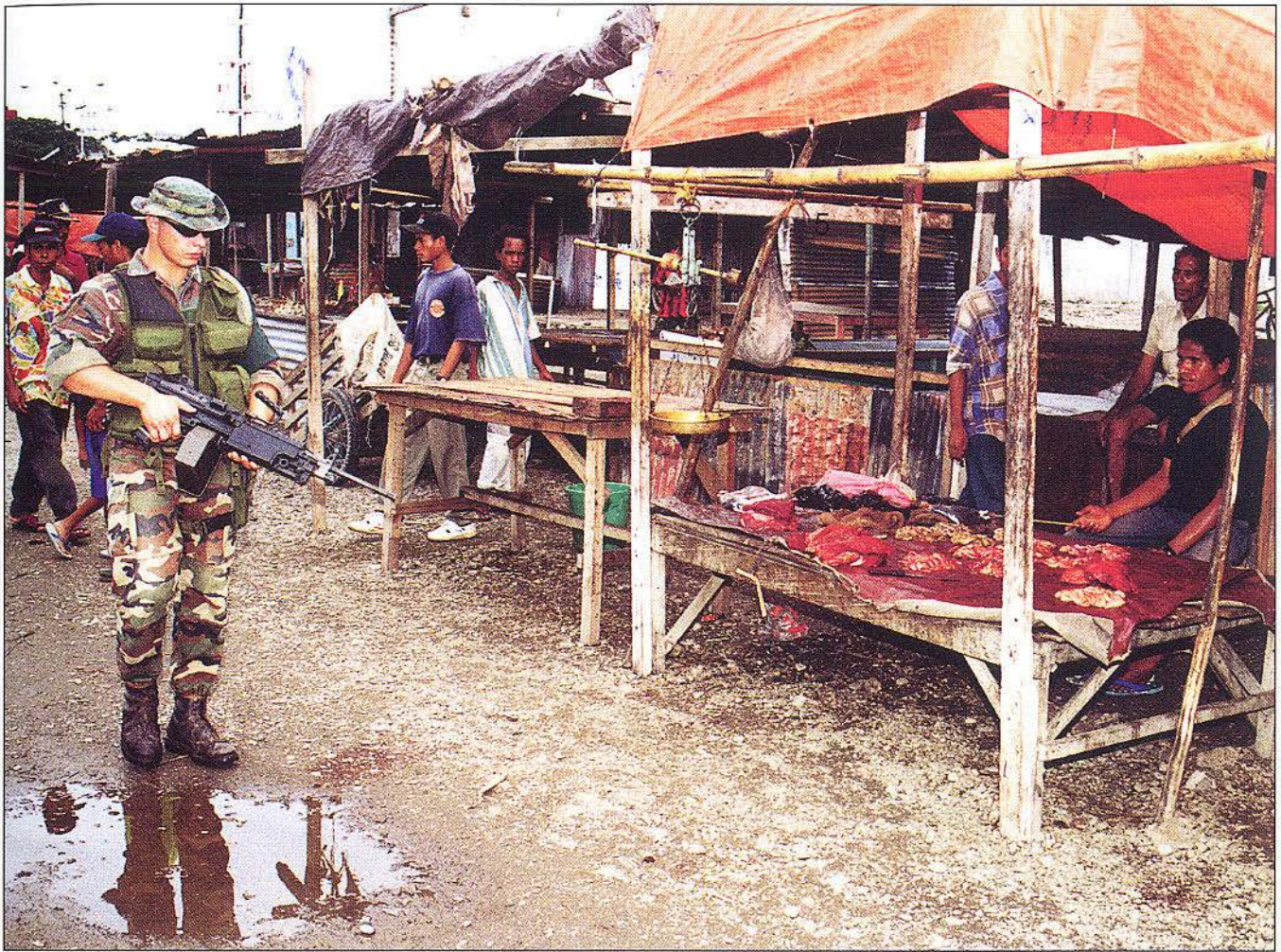
later, for the custody of the prisoners of war.

As we said before, the above considerations hold good only in qualitative terms in relation to the needs of the manoeuvre Major Units, i.e. for the Command-and-Control capabilities which, according to the Task-Organization principles, will take control of the necessary mission-tailored regimental operational modules. Therefore the number does not even take into account the need of similar levels - existing in all the main Armies - for the management of Combat Support, Artillery, Communications, ISTAR capabilities etc. The result is, with a rough but acceptable approximation, that taking for granted the number 9 as concerns the real "war-Brigades", the number of these units, both in the areas of Combat and "Combat Support/Combat Service Support"

could be, and will necessarily be, relatively more numerous.

The Brigades included in the "Division for Europe" concept correspond, in substance, to the sum of the Units envisaged both by the Projection Package and the Reaction Package, taking for granted the attribution of "double hats", meaning that it is not considered possible (or sustainable) that major crises interesting NATO and significant different missions of international security (or viceversa) occur at the same time. The same force basins must also meet the operational needs of the multinational units established either as a result of bi-multilateral agreements or to meet the requirements of the United Nations (EUROFOR, MLF, SHIRBRIG, MPFSEE) (6).

Proceeding step by step, once the operational needs and the relevant organizational solutions are



But not only that. Since a high functional flexibility must be guaranteed, both to the exterior (multinational integration) and to the interior (capability of changing the structure according to the task), in periods of time coherent with the intervention options, the land formations - and particularly the command structures - will have to be more and more integrable in Joint and Combined multinational formations but, at the same time, they will have to warrant the highest internal efficiency in the various configurations of employment, which will not be previously known.

The experience made in about ten years of missions and the necessity of a further rationalization in view of the approaching transition to fully professional armed forces, provide us with useful elements of evaluation.

First of all, considering the global scarcity of resources, it is impossible to pre-establish any command (apart from the basic manoeuvre-modules, the regimental ones) during the non-employment time, on the assumption of maximum operational employment for a long period of time. Even the ARRC envisages a great number of augmentees, in order to complete the cells designated for months-long H24 operations and to create other cells, not envisaged in advance but necessary in relation to the mission (CIMIC, INFO OPS, IEW, Public Information, etc.). If we keep in mind that the management of a modern operational theatre - even if, according to experience, the land superiority is a confirmed certainty - always requires, or even postulates, the joint configuration of the C2 system, we should always consider that the system will have to include

all the single-service modules necessary to give the structure its indispensable capabilities.

Secondly, the unforeseeable nature of the risks and the ensuing security missions make equally difficult to define exactly the corresponding and suitable command-structure. The Italian commands employed in Albania, Bosnia and Kosovo are completely different from each other and, moreover, are continuously adapted, as concerns the level, quality and type of the functions performed, prescinding from their original organization. In other words, even if the resources available were unlimited, it would be impossible to decide in advance their correct use.

It is also evident - and this is the third point - that all C2 structures in the theatre are responsible for all the security missions in the

European context, and have always been based on two kinds of Commands, either on existing pure commands with no permanently subordinate force (for instance, ARRC and JSRCENT, which replaced ARRC after the first deployment phase of IFOR and KFOR, and also EUROCORPS, which will be introduced in the theatre shortly), or ad-hoc Commands, established according to the "Vertical Slice" principle (Multinational Command in which ten Nations participate according to their contribution of operational forces) as in Bosnia, or on Commands simply put together with the various resources assembled for the mission. The latter is the normal, and ineffective, solution in case of UN operations.

The fourth point is the confirmed requirements of projectable C2 capabilities of a level higher than a Brigade. It would function as intermediate "demultiplier" of a projected theatre command at ARCC of CJTF-HQ level, in the very likely case of employment needing several national Brigades in a single theatre or the Projection Intermediate Command taking on significant multinational forces, or when the operational situation is complex and, although not implying the employment of considerable forces on the ground, requires C2 capabilities higher than a Brigade level. If the abovementioned Intermediate Command, after its Joint and Combined expansion, were to take on the autonomous responsibility of an autonomous theatre, it would assume not only tactical but also operational responsibilities and consequently need the whole range of C2CI functions (8). On the other hand, if the need to command this intermediate capability is confirmed, its possible, probable and planned employment is not certain in all missions.

Finally, since it is possible to

exclude *a priori*, at least in the European situation, the conduct of unilateral missions by a single nation, any operational theatre-Command will have necessarily to be configured as "combined", i.e. based on the variable participation of personnel from different nations. If the Command in question is on a "framework" basis, such as ARRC, also the introduction of augmentees can be done and planned easily; on the contrary, in case of an *ad hoc* structure, the process may be more complicated.

With these premises, we need to plan the construction of command structures suitable for meeting the requirements. In other words, where could we find the resources necessary in order to build or create mission-tailored C2 systems, how could these be included in the commands of the operation and, last but certainly not least, how could the Commands be structured - especially, as regards this study, the national Intermediate Projection Commands, but also the Brigade-level - in order to make them fit to integrate with external modules?

Synthesizing by concepts, we need operational commands:

- of variable geometry, in the sense of envisaging for them a modular organization, prearranged for receiving the additional complete modules, or even the individual sub-modules, necessary for the continuity of the H24 function;
- permitting the efficient use of the available resources, i.e. ready to hand over their own modules or sub-modules to other Commands, be they equal, higher or lower level;
- capable - by extending the variable-geometry concept, and after a significant improvement of the digitization of the C2 system - of taking on functions of organization and operational responsibility higher than those normally performed.

A possible solution of the problems outlined so far, still limiting our review to the Intermediate



Italian soldier on duty with IFOR, controlling a road in Bosnia.

Operational Commands, could be the logical extension of the principles of "Task Organization" to those command structures, which should progressively turn into Projection Staffs, with no permanent operational forces subordinate to them in non-employment situations, responsible for the operational planning of

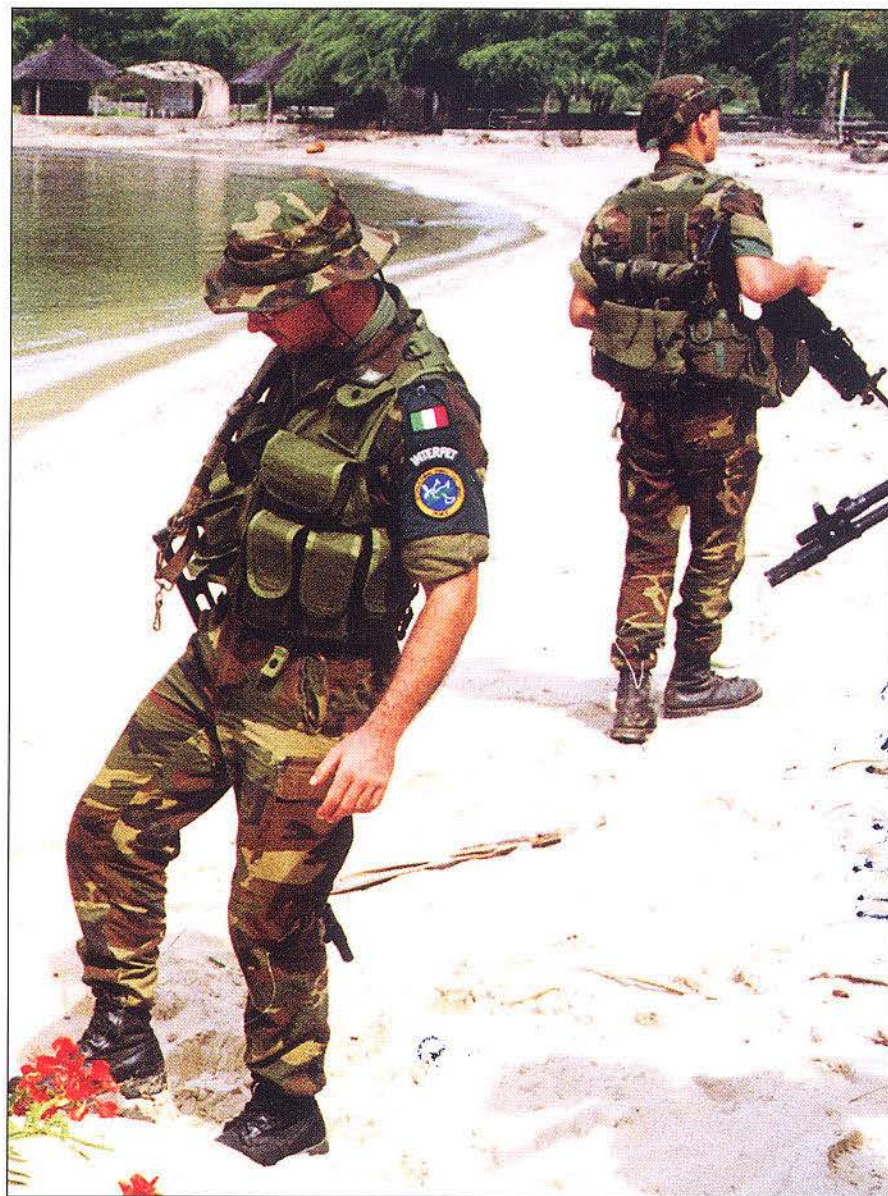


contingency operations, and oriented to carry on the function of:

- in-theatre Division-level Headquarters, assuming control of the units assigned for the specific mission;
- Supporting Hqs, for equal-level Commands designated for a mission, after the pre-planned cession of the functional modules required by the receiving level for completing or increasing its own C2 capabilities;
- Supporting Hqs, for Commands of lower or higher level.

In other words, it is first of all a matter of rationalizing the effective use of precious and limited resources, first among them the human ones, taking from the Intermediate Projection Commands all the assets needed to meet any operational requirement consistent with the Army's Operational Concept (9). This should be done also with the instrumental consideration that, with the transition to a fully professional model, the Forces available in all other sectors (Central area, Logistic

Inspectorates, Training/Schools, Specialization, Infrastructure, Recruitment, Completion Forces, taking for granted the indispensable reorganization of the Territorial Area) will be precisely adapted to requirements and work loads. In this way, it would also be possible to proceed in the direction of projectable C2 capabilities, credible and in line with the foreseeable parameters of comparison with the Allies on the European scene, ensuring the realization of flexible modules suitable, through



Controlling the Timorese coast.

a massive measure, in order to support the projection of other Commands.

In substance, once the singled-out operational solution is put into effect, any necessity of reinforcements in the Command and Control sector should be met by taking the resources (possibly, always in modules) from the Projection Commands, and no more, as was often necessary in the past, from Brigades or lower-level units which, on the contrary, within the established structure and in relation to their direct and permanent responsibility for their forces, should be considered practically untouchable.

NATIONAL C2 REQUIREMENTS FOR SECURITY MISSIONS OUTSIDE THE NATIONAL TERRITORY

We shall write a more exhaustive article on the possible solutions concerning the organizational structures of the "Projection Commands with no directly subordinate forces" when the studies under way reach their final stage. For the time being, we shall confine ourselves to an examination of the quantitative requirements in terms of necessary and feasible Projection Intermediate Operational Commands. As far as personnel is concerned, we can say right away that the requirements are absolutely variable in relation to the operational situation and, therefore, an average case of employment can only be a term of comparison that must be adapted to the circumstances. In this sense, the highest requirements peaks certainly occur in case of high-intensity operations in symmetrical conflicts. On the other hand, while these situations are very unlikely in the short term, the whole requirement of personnel could

successive aggregations, for operations at increasing levels of complexity.

Such a process, in many aspects as necessary as it is revolutionary, goes through the rationalization and simplification of the functions of the various levels, already widely established in the military culture of the major European allies. In short, we shall have to stop anticipating the development of all the functions of command, from everyday affairs to infrastructure, operational planning, etc. at all levels, and proceed from a situation where, from regiments to COMFOTER (Land Forces

Command), everybody almost does the same things in growing areas of competence, to another of specialized responsibilities, on the basis of the functions assigned. An important and indispensable consequence of this is the need to remove from the Intermediate Projection-Commands (Planning Staffs), all responsibilities connected with the ordinary management of the directly dependent forces in order to make the main task credible: preparing and fortifying the Command, so that it may assume the direct control of the forces assigned for a mission, or transfer its own modules, even in

Italian soldier giving sweets to a Bosnian little girl.

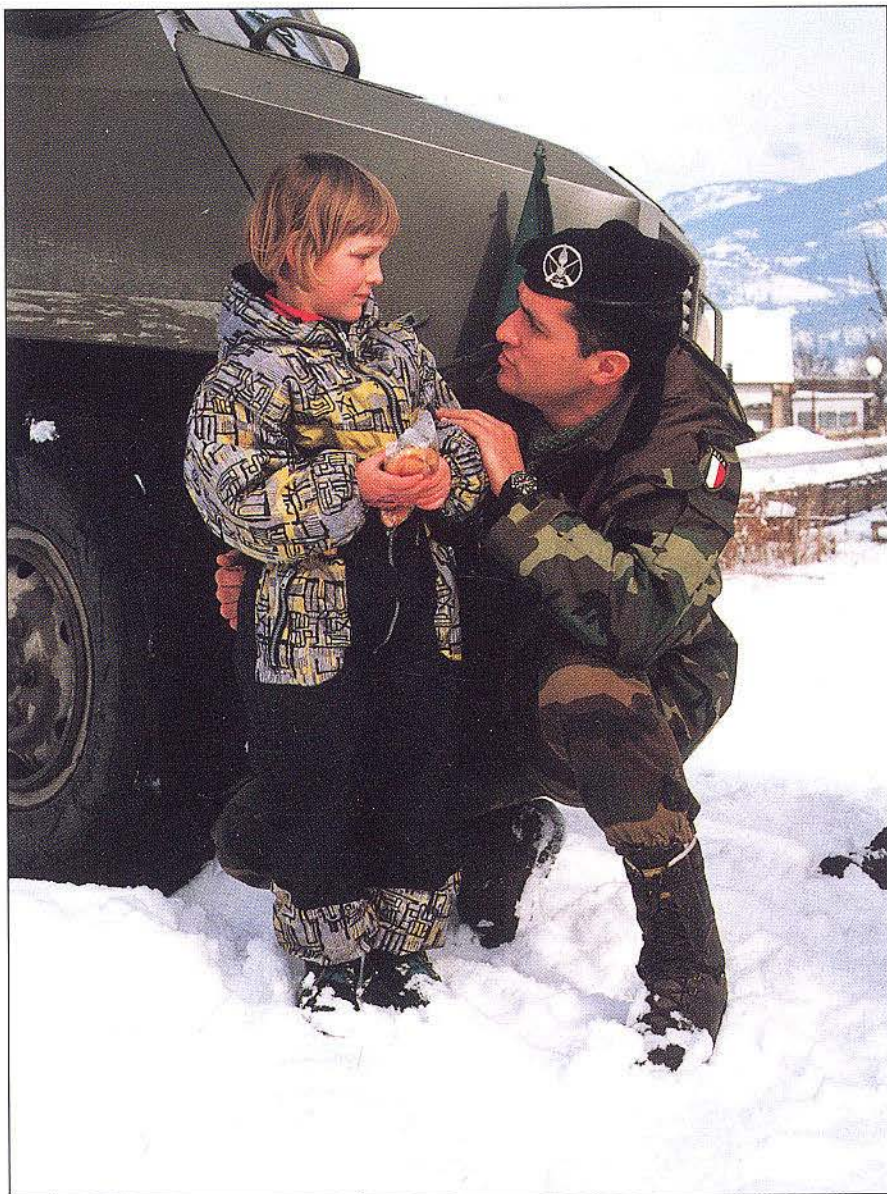
even be lower over a certain period of time, because, in those circumstances, the operational cycle cannot envisage the in-Theatre rotation of forces and Commands, and it would be impossible to task lower Commands with significant responsibilities pertaining to the higher level. For medium-intensity operations, we can roughly consider a global staff requirement of approximately ninety Officers and fifty NCOs, augmentees included. As for Brigades, we can consider about one third less, but they will have to be sustained for a longer time.

In terms of numbers of Major Units at Projection Intermediate-level, the present command structures envisage only two of them, plus the two FODs.

Still as a first approximation, the number does not seem to be sufficient, even if we anticipate, in case of employment at Division level, the rotation on the basis of 2 instead of 4, as for the other forces; this is due to the fact that, taking into account the probable requirements of augmentees and the sequential employment of commands, and not considering acceptable the idea of taking modules from the Brigades or from COMFOTER, there would be no other resource basins available, from which to take the necessary additional modules, unless they are taken from FODs.

As regards COMFOTER, it should be considered that it represents a "fixed" requirement, in that it is indispensable for managing:

- from the logistic-administrative and training point of view, the Brigades and the CS and CSS Commands/Groups, once they become directly dependent;
- from the operational viewpoint, the operational and participatory activities with the 4th and 5th



joint missions (in fact, also in view of the development of ESDI, the operations connected with the 1st, 2nd and 3rd joint missions will fall, depending on the situation, within the province of NATO, the EU military organization, or other international Organizations/Treaties.

Furthermore, the Operational-Command level of the Land Forces is a modern organizational response, adopted by all the European armies, in order to give a unitary vision to the activities of preparation of the instrument.

The availability of only two Projection Intermediate Commands

does not seem to fit the even less onerous type of employment, i.e. as Supporting Hqs, because if, for example, the first provides the additional modules for the theatres, or perhaps for the completion of the projection capability of a NATO Sub-Regional Command (therefore in a condition to operate as CJTF HQ), the second will have to intervene later to guarantee the rotation, and it would be impossible to follow the training cycles indispensable to keep the operational capability and to develop the operational planning.

Still keeping in mind that the final reference of our work is the professional model, tentatively

based on 9 complete Brigades, plus the equal-level Combat, CS and CSS Groups, we can take as a reference the French Army which, precisely for the reasons discussed above, envisages to establish 4 Planning Staffs. Therefore we can believe that the right number, coherent with the Italian situation, could be approximately 3 Projection Commands, considering the possible reconfiguration of FODs, in order to meet priority requirements of projection and conduct of missions of international security.

Once the model is well-established, it could be possible to entrust the 3 Intermediate Projection Commands with the secondary task of acting as C2 Structures for the missions of presence and surveillance or for territorial defence. Their readiness should be kept, and verified - during the non-employment phases - through the cession by COMFOTER of the operational control of the Brigades not employed outside the Country. Obviously, these Brigades would be directly subordinate to COMFOTER, on a yearly rotation basis, for the conduct of the training activities and exercises scheduled for that period.

Let's move on to the verification of the requirements, with reference to the international Organizations and initiatives.

NATO's C2 REQUIREMENTS

The new Strategic Concept of the Alliance, announced at the Washington Summit, describes the capability of crisis management as one of the fundamental security-tasks carried out by NATO, also through the execution of military missions.

The performance of this task requires, among other things, the availability of adequate capabilities, concerning both Command-and-Control and rapid interventions in the Theatre (in order to face simultaneously two

non-Art.5 major crises (MC 400/2) and a minor one, which could be "Art.5") as well as capabilities of consolidation, in order to be able to sustain the operations for long periods of time. This is the case of the mission in Kosovo, where the initial projection, KFOR1, has been entrusted to ARRC, while the consolidation, KFOR2, has been carried on by JSR CENT, and continued with other kinds of C2 structures (EUROCORPS or various types of "Vertical Slice" based on JSR Hqs).

Thus, the first requirement is fulfilled by the Reaction-Forces Commands, i.e. only the Headquarters of ARRC. Therefore, vis-à-vis the three possible Theatres, there is only one command capability for projection or there are two, if one wants to consider AMF(L) which, in any case, could only be a "substitute" in a minor Theatre. The sustainability of the operations does not find a response in the doctrine and, for the moment, is assured, on the practical plane, through ad-hoc solutions, that we could even call "expedients" (vertical slice model, composite Hq).

In synthesis, to meet the present and foreseeable operational requirements, the Alliance should equip itself, in the short-medium term, with projectable command-and-control capabilities for:

- immediate interventions;
- ready interventions;
- consolidation.

Thus, also considering the existence of 7 "tendentiously static" Commands with mainly "regional" characteristics (JSRC), it is easy to note the lack of a projectable Command-and-Control capability, equivalent to the one today represented by ARRC. The new Command-and-Control structure of NATO is based, as is known, on 2 Regional Commands (JRC) and their subordinate 7 sub-Regional Commands (JSRC). In operations, the RCs carry out the conceptual



An Italian convoy in Kosovo.

functions typical of CJTF Hqs and take on the Command of a "Regional Joint Operation Area" (RJOA), while the JSRCs, in case of sub-regional operations, can set up the SRJOA HQ.

After this premise and as



anticipated in a preceding article (10), we can easily note the necessity of strengthening the NATO Command capabilities that must be timely projected for the management of military peace-support operations. In view of this, both because ARRC is located within the Central Region of NATO and to find a location closer to the possible critical

areas, and also in order to give credibility to the assertions on the fundamental importance of the "southern flank", it would seem coherent to affirm that the new capacity should be located in the southern area of the Alliance.

In other words, Italy could exploit (to a good end, of course) a probably unrepeatable opportunity, certainly fundamental for the role

of the Country in general and for the three Services in particular: the possibility of offering a remarkable contribution to the Alliance taking upon itself the burden of providing to the new Command capability the "Core Staff" and the entire general and C4 support, asking at the same time that they be located in Italy and placed under the national leadership.



As regards the development options worked out by the NATO Military Committee (11), and without going into details still under study, we shall confine ourselves to the basic organizational concepts.

First of all, the possibility of realizing a Command capability comparable to the second ARRC will require, in the first place, the concrete national willingness to achieve this goal, then the demonstration that not only the Army but the other Services as well are capable of achieving it. In other words: the ability to first realize and later to offer the adequate structures to sustain the effort.

With these statements, we are back to the issue of the effective use of the limited resources in the C2 sector of the operational forces and, by doing so, we set another objective.

In fact, only proposing something

real it will be possible to overcome the obvious international reservations and the equally obvious interests of other Nations.

The first priority consists in the constitution of a framework Corps Command (based on the structure of an existing Intermediate Operational Command, which will have to be upgraded), with about 60% Italian personnel and the rest from the other NATO partners, "under NATO command", and with a projectable general support and C4 unit provided by Italy.

The second priority, instead, envisages the attribution of the projection capability (generation of a CJTF HQ) to the JSRC South in Verona, through the expansion of the Staff (core Staff of the CJTF HQ) and the assignment of a national "projectable" general and C4 support component. Thus, this will still be done by utilizing the resources of an upgraded

Intermediate Command.

This said, in purely "quantitative" terms the resource "basin" from which to draw the elements for the constitution of the Command capabilities at issue will be once more the existing Operational Commands, in particular the two FODs, about which we have already mentioned the need for their reconfiguration. In addition, there will be the "basin" represented by the resources already assigned to the JSRC (S) in Verona (see priority 2).

Both solutions, from the quantity viewpoint could be feasible for the Army, if we consider as solved the many problems which, on the contrary, are still to be tackled.

First, the final dimensions of the professional model.

Second, the political authorization to "cut" non-vital sectors of the Superstructure, in favour of the operational component, that will

Facing page.
Vehicles of the KFOR Italian contingent.

Right.
Surveillance duty in Bosnia.

have to be more efficient.

Third, the support to the other Services, free from any parochial reservation. The last problem should be the easiest to solve, at least according to logic, since the "European Security Project" and the recent experiences made in the theatres of crisis, undoubtedly give a "supporting" but fundamental role to the Navy and the Air Force vis-à-vis the Army, which is the Service "supported", sometimes significantly, in the performance of its security missions.

Therefore, considering as untied some knots that to tell the truth are still there, the 2nd priority, envisaging the constitution of an ARRC Command, fully meets the NATO requirement and does not change the present command structure of the Alliance. But it is the most onerous.

The second option, that of strengthening the JSRC (S) in order to put it in a position to originate a CJTF HQ, providing the Core Staff, presents some limitations as regards the degree of fulfillment of the NATO requirement. In substance, should the "ARRC-type Corps" option be the one preferred by NATO, this offer could anyway be pursued, but it would not exclude the constitution of a second "regular" ARRC Command, based on an "all NATO" multinational Corps, such as, for example the German-Netherlands or the German-Danish-Polish Corps. Furthermore, while the "2nd ARRC" solution permits a clear and univocal employment of resources, the other, "Core Staff of a CJTF HQ", implies greater organizational acrobatics.

Without going into further details, and as a synthesis of the two options, another line of action -



still to be verified - could be that of proposing, as Italian offer for the solution of the NATO problem concerning the expansion of the Command capability for the Reaction forces, the establishment of a Corps, upgrading the resources of an existing Intermediate Operational Command (FOD), "under SACEUR's command", with a Staff that should be progressively made multinational with personnel provided by the other NATO partners.

This unit could be employed at

the outset of a crisis prescinding from its multinational level, both as ARCC "Core Staff" - to be completed with augmentees provided by other Nations - and as a package of augmentees prearranged in favour of the JSRC(S), in order to enable the latter to express the "Core Staff" of a CJTF HQ.

In conclusion, the evolutions within NATO confirm the requirement for a Projection Intermediate Command - ready and appointed, assigned to ARRC

TABLE 1

SYNTHESIS OF THE PETERSBERG DECLARATION (JUNE 19, 1992)

Besides their contribution to common Defence in compliance with Article 5 of the Washington Treaty and Article V of the Brussels Treaty (modified), the military units of the WEU's member Nations, operating under WEU's authority, could be employed for:

- humanitarian activities and evacuations;
- peacemaking missions;
- combat tasks in crisis management, including peacemaking*.

*Peacemaking is generally defined as "peace enforcement". Missions of this type are often described as "Petersberg Tasks" (or Missions).

AUTHOR'S NOTE

The definition of the Petersberg Missions is a cornerstone of the elaboration of the security project in Europe.

They include all the so-called MOOTW missions (Military Operations Other Than War) which, in their turn, comprise the wide range of PSOs.

Used as references within ESDI, they indicate that the only operation not envisaged under the "Petersberg" mandate is the high-intensity traditional war in a symmetric conflict.

The term "Petersberg Missions" is also replacing, in the international environment, the terminology related to the concept of PSO, on which there has never been a real convergence among the Nations involved in the common security project.

guarantee, by the end of 2003, the EU's capability of deploying forces able to conduct, within the entire range of the Petersberg Missions, operations up to Corps level (15 Brigades or 50-60,000 men), self-sufficient, deployable in 60 days (unless a reduced component is considered, with a higher level of readiness), sustainable for at least one year.

This goal, as far as the Italian Army is concerned, appears to be fully in line with "Division for Europe" concept. As regards possible intermediate command levels between Brigades and Corps, although there are no specific references in the "Headline goals", it is easy to foresee the requirement of some C2 assets, both as in-theatre reduction-gears and for the autonomous management of situations for which the deployment of a Corps would not be necessary or appropriate. As a consequence, one of the projection Commands - in the same way as the FOPs Command - should be designated as Command of the Italian "framework" Division of the ARRC, and given that specific mission, at least as Command tasked with the initial projection. After that, it could be replaced in the theatre by a similar Command taken from the available ones. It is worth remembering that the operational concept of the Italian Army does not consider the possibility that - in the medium term - there could be the need of a simultaneous maximum engagement, at Division level, in more than one theatre. This means, also in accordance with the EU plans, that only the development of security missions of limited proportions is considered possible during major NATO missions.

EUROFOR

Although they are not directly connected with the main subject of this article, some considerations on EUROFOR seem to be appropriate.

and capable of expressing C2 capabilities at Division level (FOP Command). Furthermore, there is the new possibility of establishing another Italian Command-capability, similar to that of the ARRC, according to two different options and using resources taken from an Intermediate Command (FOD).

Any other requirement at Division level, such as the non-realized MND (S) (Multinational Division South) could be met by attributing a double (or triple) hat to one of the already operational Projection Commands.

C2 REQUIREMENTS WITHIN THE ESDI/EU (WEU) - LED MISSIONS

The Helsinki Summit of the

European Council (12) confirmed "the political will to acquire the capabilities necessary for carrying out EU-led missions, aimed at maintaining peace and international stability, within the entire range of the Petersberg Missions" (Table 1).

In order to give effectiveness and credibility to the process of achievement of the necessary European operational capabilities, the Helsinki project intends to develop the already existing capabilities and to organize them for conducting missions of international crisis management, by employing (but not necessarily) assets made available by NATO.

As is well known, the Helsinki Charter, at the paragraph dealing with the "Military Capabilities for Petersberg Missions", established a set of main objectives (Headline goals), meant as a whole to

This organization is a C2 capability, conceived for planning and carrying out missions of collective security, without permanently assigned operational forces: therefore a Planning Staff.

On the other hand, in order to meet the requirements summarized in the preceding paragraphs, the Italian Army, already in the short term, could be called to employ all the available resources, in terms of operational Commands, as it happens with the German Army. In that case, the Service would be tasked with the development of structures for planning/conducting NATO-and/or EU-led operations, attributing more than one "hat" to its Intermediate Commands.

The national participation in multinational Commands also falls within this framework, EUROFOR in particular (Table 2), because this Unit, as a WEU structure suited to Petersberg-type missions, must be made usable and really efficient through the solution of problems which have not been solved so far, causing a kind of politico-military *impasse*. In other words, if it is true that EUROFOR does not have any bearing on the solution of the operational problem of our Army, it is also very true that it is closely connected with the issue of Command and Control of the EU-led missions, which eventually the whole WEU will have to join.

But the definition of the future organization of EUROFOR, according to the ongoing process based on the consequences of the Helsinki Document, necessitates the preliminary solution of several problems. First of all, the renewal of the operational concept of EUROFOR which could be transformed into one of the following:

- Command of the Immediate Reaction Forces, for the part of the EU Corps which will have to be characterized by high levels of readiness. Therefore, EUROFOR could be for EU what the AMF(L)-IRF represents

TYPE: COALITION OF THE WILLING
(MULTINATIONAL AGREEMENT)

Participants:

FRANCE, ITALY, SPAIN, PORTUGAL

LEVEL: "ON CALL" DIVISION

Employment:

WITHIN ESDI FOR "PETERSBERG TYPE" MISSIONS

EMPLOYABLE IN WEU, NATO, UN/OSCE CONTEXTS → EU

today for the NATO forces, with a simple adaptation of its structural organization;

- Force Command, for the conduct of EU-led operations, when the level of the employment required is lower than Corps. In this case, it would become a Planning Staff, with a full (or by modules) projection capability, fit for producing the C2 capability necessary for managing theatres at Brigade or Division level. A possible expansion at a higher level could be achieved only in the long term, and only if it is justified by future operational needs, requiring higher capabilities. But, in any case, the expansion must be consistent with the development of the studies on the variable-geometry Commands and Digitized Divisions. These concepts are meant to make Division-level Hqs potentially suited to manage Corps-level units, after the introduction of preplanned modules and the virtual digital extension of the control arm of the manoeuvre.

These considerations about EUROFOR are only conceptual

attempts, identical to those made by all European Countries in order to increase the cost/efficiency ratio of the already existing multinational formations.

COALITION OF THE WILLING

The last sector that should be examined before trying to draw any conclusion, is that of the "unforeseen events" which, in the military environment, should be considered "very probable".

Other possible crisis situations in Europe or adjacent areas, in fact, cannot but be managed by NATO or WEU, but very recent experiences (East Timor) and less recent ones (Somalia) taught us that the crisis situations that could possibly concern the international community are global, and particularly frequent in areas of potential national and European interest.

These considerations involve, once more, the forces and C2 capabilities of the "Division for Europe", conceptually expanded in order to become a "Division for international security needs". This

TABLE 2

EUROFOR



An Italian Check Point with an armoured vehicle on the outskirts of Sarajevo.

is a further demonstration that the two Division-level Commands, presently envisaged by the concept, should be increased to three, to achieve the flexibility required by the everchanging scenarios, the manifold and growing risks and the continuously increasing security needs.

CONCLUSIONS

Let us sum up the numerous elements concerning the contribution of the Command and Control capabilities needed for the development of international missions coherent with the growing ESDI project. These

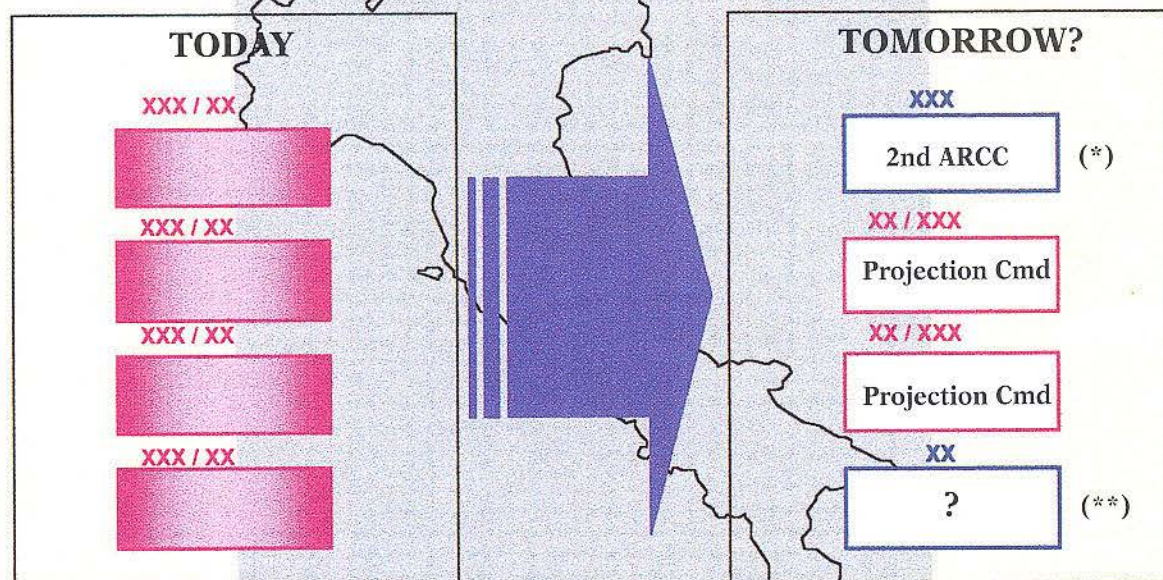
missions should be considered both within NATO and as an autonomous EU endeavour to acquire credible capabilities for the management of crises in Europe, and can be listed as follows:

- NATO preplanned: C2 capability similar to the ARRC's, to be realized in a Joint and Combined environment, with the employment of personnel drawn from the requalified Intermediate Commands; furthermore, a Division-level C2 capability, already assured and expressed by the FOP Command;
- EU preplanned: Division-level, projectable C2 capability, to be established within the present second Projection Command. The C2 capability similar to the ARRC's could be realized in a national framework, and

would also be available to EU-led missions;

- in-theatre sustainability of NATO/EU missions, with a Division-level national commitment, i.e. the Intermediate Command not initially employed plus a desirable third one, which could be realized through the reconfiguration of a FOD Command, in order to draw from it the augmentee modules (Parent Hq) or to maintain the operational capability of the unengaged forces;
- in-theatre sustainability of NATO/EU missions of a level lower than national Division, i.e. two Intermediate Commands as Supporting Hqs for providing the additional modules necessary to the projected Brigades or Regiments, plus a third desirable one, for the

“NEW” C2 REQUIREMENTS FOR NATO/ESDI “RFs”



* according to described options

** If established, and if the requirement is confirmed, it could play the role of MND(S) Hq.

PROJECT FOR THE ADAPTATION OF THE LAND INSTRUMENT

- already mentioned reserve functions. This context also includes the employment of the multinational formations based on Brigades and realized through multilateral agreements;
- in-theatre sustainability of NATO/EU missions with a commitment higher than national Division (Theatre Operational Command, augmentees for a CJTF Hq on a JSRC basis), in case of non-availability or non-employment of a national ARRC, i.e. an Intermediate Command as Supporting Hq for supplying the additional modules needed for the constitution/integration of the Headquarters plus another intermediate Command which should provide the augmentees necessary to the projected units at Brigade or Regiment level plus, again, the third “desirable”

reserve one.

Altogether, it would be a reconfiguration of the present situation considering four Intermediate Commands, two of which for Projection, in a new architecture where we could see (Table 3):

- C2 capability similar to ARRC, as a first priority, in order to have a national-framework Multinational Corps, or as a preplanned capability for strengthening JSRSOUTH, in order to achieve CJTF-HQ capabilities. In the short term, the latter function will have to be carried out by one of the Projection Commands, to be requalified in the shortest possible time, according to the abovementioned principles and, therefore, without directly subordinate forces;

- three Projection Commands (Planning Staffs) capable of expressing projection C2-capabilities at Division level, expandable in a Joint and Combined sense, organized with a variable-geometry architecture, through which the inclusion and cession of functional modules would be easier. All Commands would carry out several different tasks (i.e. main: NATO, secondary: EU, complementary: provider of additional modules, etc.). The number three, always mentioned as desirable, becomes indispensable if the adoption of the “2nd ARRC” option is impossible. This, in order to provide the packages of resources necessary for making JSRC South projectable or in case of additional requirements connected with the MND(S).



design which is taking shape on the European scene.

□

** Colonel,
Chief, Plans Office
Army General Staff*

NOTES

(1) See "An Army for Europe", *Rivista Militare*, Eng. Ed., no 1/2000. The article is the "master" of the whole cycle "The Army project for Europe", which will appear on "Rivista Militare" in the course of this year.

(2) ESDI: European Security and Defence Initiative (or Identity), depending on the reference organization (WEU/EU or NATO respectively). Its objective is the realization of a European security and defence identity, within both NATO and EU.

(3) PESC: Common Security Foreign Policy. A whole of activities aimed at building the 2nd Pillar of the European Union, i.e. the security one.

(4) The maximum possible and sustainable effort for the Italian Army is equal to a Division (2 Brigades), plus possible multinational formations in a single theatre, or a Div.Hq. plus two Brigades in two different theatres. At the same time, the forces must be capable of sustaining a minor or particular theatre (low level of forces and/or short duration) or of guaranteeing the availability of the forces required by the multinational units.

(5) STANDARD BRIGADE. See "An Army for Europe", *Rivista Militare*, Eng. Ed. no 1/2000.

(6) See "Multinational Forces. The New Frontier of the Army", *Rivista Militare*, It. Ed. no 3/2000.

(7) See "The Army Project for Europe. Task Oriented", *Rivista Militare*, Eng. Ed. no 2/1999.

(8) C2CI: Command, Control and Communications (in a general sense, all those involving electromagnetic space), Intelligence. It possesses all the available C4IEW systems.

(9) See "An Army for Europe", *Rivista Militare*, Eng. Ed. no 1/2000; "The Future. The Army of the 21st Century", *Rivista Militare*, It. Ed., no 6/1999; "The

As regards the time required for accomplishing the whole project, we shall have to act gradually, starting from the already existing Projection Commands, completing them one by one without interruptions, in order to meet the already urgent requests of completion put forward by the Commands engaged abroad. The successive passages will have to be considered also in the light of the desirable development of an ARRC-type Command which, if pursued with the aim of transforming it into a Projection Corps, could use up

many resources which, in any case, from the cost/effectiveness viewpoint would be well spent.

In conclusion, also as regards the Command-and-Control architecture of the operational forces, the changes made or under way will involve extraordinary transformations, making further rationalization measures absolutely indispensable. Once more, on the other hand, the only alternative is failure; we would limit our presence to mere representation and participation of military formations, without any role within the great security

Facing page.
Italian servicemen in Mozambique.

Right.
Somalian children playing with Italian soldiers.

Below.
A member of the Explosive Devices Clearance Unit making preparations for blasting a grenade.

Army of 2000. The current Situation", lecture by the Deputy CoS of the Army, published by "Rivista Militare", Eng. Ed., no 1/2000.

(10) See "An Army for Europe", Rivista Militare, Eng. Ed. no.1/2000.

(11) NATO option for the constitution of an ARRC-equivalent Command capability:

- a second Corps-level ARRC Command, under SACEUR'S Operational Command, could be provided by a



"framework" Nation, a group of Nations, or established as a completely multinational unit;

- national or multinational Corps-level Command, "assigned" to NATO, or assignable through particular procedures. It could be selected among the multinational Corps-Commands already existing within NATO's force structure, and could be established in a permanent form or with rotation criteria.
- a command capability originated from the present NATO structures. Personnel of the JSRCs can be employed as reinforcements or for rotations, on the basis of the CJTF's concepts of mobility and readiness (medium-term option, connected with the implementation of the CJTF Concept);
- a type of Command for the Reaction Forces, based on a digitized land-Command, for Corps-level operations. This is a long-term option, based on the development of the Alliance's IRTF concept, permanently managed, under NATO command and augmented through the contributions provided by the Nations, with a Division/Corps-level Command.

(12) See "An Army for Europe", Rivista Militare, Eng. Ed., no.1/2000.

Multinational Forces

THE NEW FRONTIER

OF THE ARMY

by Giorgio Cuzzelli *

The leading role assumed by the Italian Army on the international scene is closely connected with the acquisition of a high capability of integration in the international contexts. This well-established capability now faces a new challenge: the participation in non-NATO and non-EU/WEU multinational forces.



Readers will forgive us if this time, for a change, we don't make the Berlin wall fall down.

Nevertheless we cannot avoid remarking that the changes occurred in the last decade within the national and international reference pictures have deeply altered the very nature of the land instrument. Lacking - or, rather, not being reasonably conceivable - a direct military threat against the territorial integrity of the Nation, the Army, formerly a local producer of security, turned into a leading actor on the international scene, wherever the national interest, together with the necessities of collective security, required its intervention. The force projection connected with international stability has thus





become the primary vocation of the instrument. The transformations under way are indissolubly connected with this vocation, and are guided by the common thread of multinational integrability. The highest expression of this integrability so far has been the well-established participation in the NATO Reaction Forces, in the EU/WEU initiatives - EUROFOR *in primis* - and in the various coalitions in support of peace. Nevertheless, although the abovementioned examples can be

considered firm, the constant pursuit of a balance within an essentially unstable international system has led to other initiatives which, beyond their merely military aspects, subtend important developments on the political plane. Therefore, we shall point out the Italian participation in three multinational formations, born outside NATO and EU/WEU, probably little known to the public at large, but nevertheless emblematic, both as regards the search of new balances and as

examples of the renewed international vocation of the national land instrument.

They are: SHIRBRIG (1), MPFSEE(2) and MLF (3). As we shall see, they are, together with their elder sisters in NATO and EU/WEU, the new frontier of the Italian Army. However, before examining them thoroughly, and in order to fully understand the nature of the Italian contribution, as a beginning it seems appropriate to dwell briefly on the principles which up to now have guided the

Italian participation in multinational initiatives taken outside the traditional system of Alliances.

THE ITALIAN POLICY OF PARTICIPATION

In general terms, we should say that, up to now, Italy has not subscribed to any further international obligation, besides those undertaken with the North Atlantic Treaty. As a consequence, NATO's requirements, and in particular the commitments made within the Alliance's Reaction Forces, are pre-eminent over other options of employment of the national military instrument.

This said, and excepting the present prospects of constructing a European Security and Defence identity, the Italian Armed Forces, as regards contexts different from NATO, are ready to assume a role, coherent with the international missions assigned and with the commitments subscribed by the Nation, within the limits of national interests, political decisions, priorities of intervention, as well as within the restraints imposed by the actual availability of resources and sustainability of efforts.

In particular, as far as the Army is concerned, its participation, always subordinate to the concept of maximum effort sustainable in the different circumstances, is normally ensured by force packages, determined according to the mission, suited to the task and at different stages of preparation. But we are going to discuss these subjects later on.

However the possible deployment of the national component will require a political decision, which will have to be made case by case as a precondition of the Force Generation activities. The contribution will be shaped in detail in conformity with the task, be self-sufficient as regards logistics, and ensure in every circumstance a Command-and-



Control structure and a visibility adequate to the size of the Italian participation. In particular, the Operational Command will always be in the hands of the national Authority, who will exercise it through the Joint Summit, while the Force Commander will be charged, at the most, with the Operational Control, once the contingent has reached the Theatre. In addition, the Italian component will have to be appropriately represented at all levels of Command and Staff, in order to suitably safeguard its own forces.

In this sense, from the army's

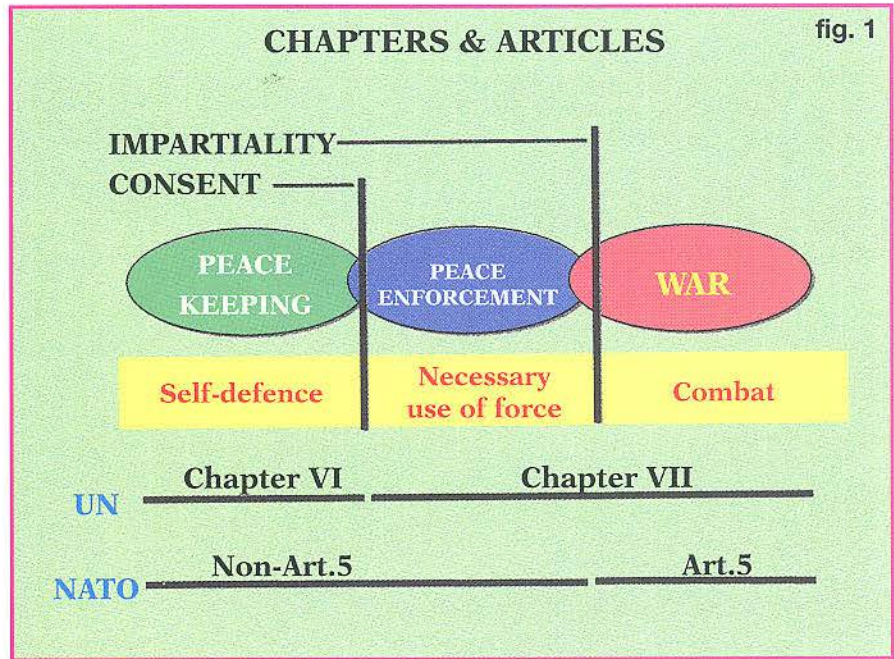
In East Timor, tactical communications have played a fundamental role in the control of the territory.

point of view, the minimum level considered is that of framework Regiment, open to the contribution of other Countries, provided with a strong C4 support and appropriately represented within the multinational staffs. The preplanned transfer of assets outside the contingent must be excluded, while options for multinational support could be considered, if they appear more

profitable than complete self-sufficiency.

Having pointed out the prerequisites for participation, one should also discuss the main operational requirements that may occur, in order to have a general indication about the forces to be assigned to the task. As we shall see later, talking about the employment options of the different formations, in practice one should consider the entire range of the possible conflict and non-conflict situations, generally on an asymmetrical basis but

Control activity at the village of Mamalai, East Timor.



without excluding *a priori* the almost symmetrical contingencies. So we move from humanitarian interventions - characterized by the employment of special and costly resources, low risk, high visibility and strong logistic attrition - to tasks of the kind envisaged by Chapter VI of the UN Charter -

whose typical features are low intensity and medium-low attrition, but which require an adequate protection of the forces as well as a capability of deterrence and limited enforcement and can reach the level of the peace-enforcement missions envisaged by Chapter VII. At the extreme

limit of these missions there are high-intensity strong-attrition conventional operations, very similar to the tasks of common defence deriving from the application of Art.5 of the Washington Treaty (Fig.1).

In addition, considering the absolute vagueness and aleatory



Left.

Experts from the Explosive-Devices Clearance Unit in Bosnia, preparing to set off confiscated munitions.

Below.

In situations of internal conflict, children are the most affected.

and medium term, considering the increasingly felt need to act at the onset of a crisis, not only in a credible but, above all, in a more timely manner.

More specifically now, together with the general political problem of obtaining each time the Member States' agreement to the intervention, there are technical considerations concerning the actual readiness, sustainability

nature of the Operation Theatres, as well as the need of having the contingents rotate every four-six months, it is essential to envisage the employment of easily deployable forces, practically self-sufficient - therefore sustainable with relative ease - but provided with a wide range of equipment.

Consequently it will be suitable to single out preferably light units, integrable with tactical and logistic supports determined each time. These units, owing to the very nature of the role assigned to them, have to meet rather stringent criteria of readiness. Thus, they must be ready, readily employable and necessarily professional forces.

As is known, to meet these requirements the Service has chosen the capability approach both as regards the problem of the economy of forces and their sustainability. The solution, which conforms to the principle of task organization, presupposes the assembly - around the Command-and-Control elements required by the nature of the task - of functional modules with single elementary operational capabilities, taken from the pre-existing

reservoirs of forces. At the same time, although the units earmarked for operations in particular contexts are normally predesignated, this type of approach allows the Service to draw from other resources if, at the outset of the contingency, the forces initially considered are not available.

SHIRBRIG (STAND-BY HIGH READINESS BRIGADE FOR THE UNITED NATIONS)

SHIRBRIG was created within the general framework of UNSAS (UN Stand-by Forces Agreement System), a non-binding agreement between the UN and the majority of the member Countries, in the early '90s, in order to provide the Organization with a pre-established reservoir of military capabilities, from which to draw in case of Peace Operations (4).

On the basis of the experience of the last five years, within the UN there has been a growing opinion that UNSAS by itself could only be a partial response to the envisageable requirements deriving from the intervention scenarios foreseeable in the short



NATIONS PARTICIPATING IN SHIRBRIG

fig. 2

SUBSCRIBERS TO ALL THE AGREEMENTS (LoI + MoU SC + MoU SB + MoU Plan Elm)



LoI



LoI + MoU SC



LoI + MoU SC + MoU SB



OBSERVERS



and interoperability of the forces made available to the UN (5).

In view of this, on the initiative of Denmark, a group of Nations joined forces, in order to give the Organization the military capability of rapid reaction that UNSAS seems to be unable to provide in full.

The initiative, joined by Italy in 1999, involves, at different levels, numerous NATO, non-NATO and Non-Aligned Countries, and is still open to others; the only prerequisite for full membership is the countries' capability of autonomously sustaining their own forces in case of employment (fig. 2).

Thus, SHIRBRIG is a Rapid Reaction Major Unit, at Brigade level, consisting of predetermined national units, whose participation is decided as the need arises.

According to the intentions, it should have good capabilities of deterrence and self-protection, should be ready within 15-30 days and employable for a maximum period of 6 months, with no geographic limitations.

Guided by a multinational Command with rotating tasks, whose forerunning element has

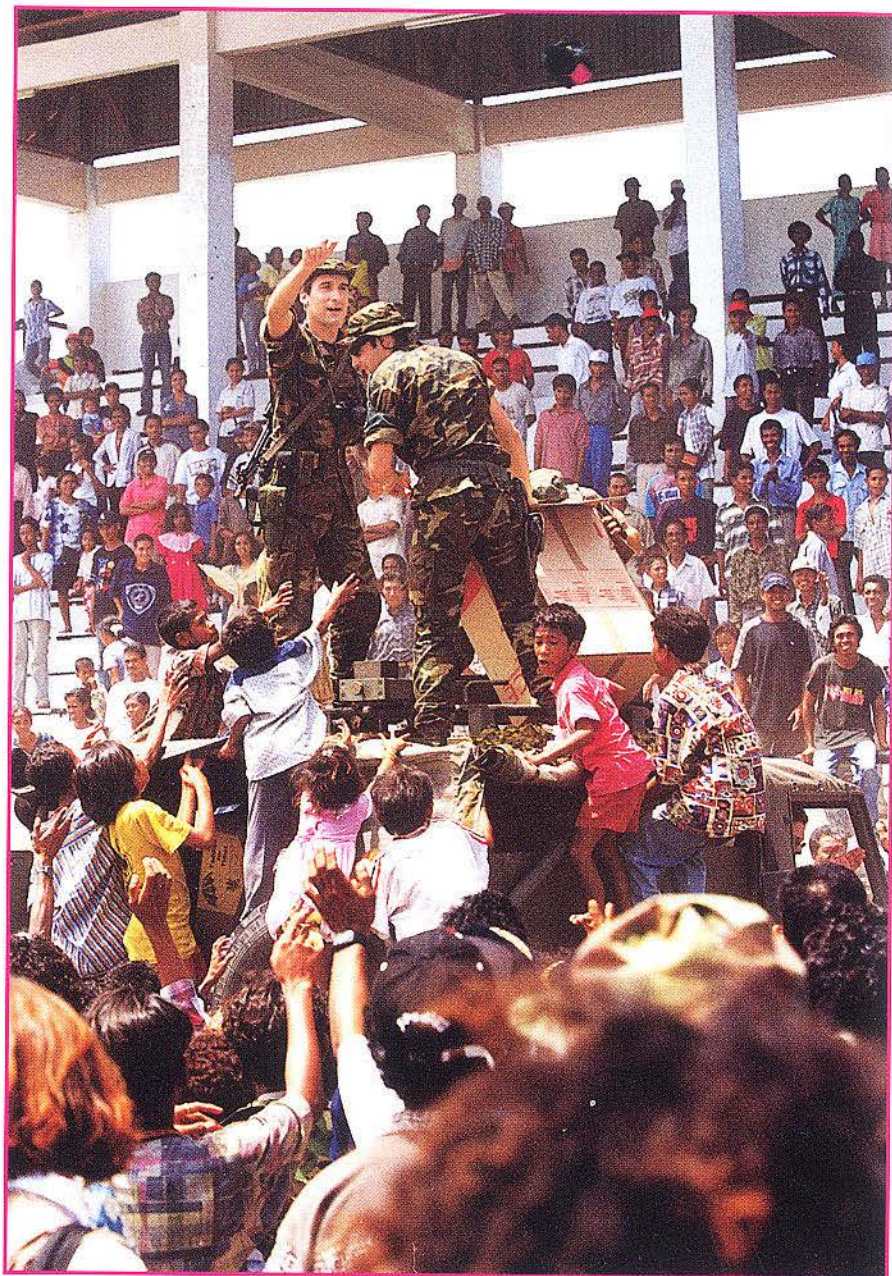
Christmas distribution of toys to the children of Dili, East Timor.

been existing in Denmark in peacetime, it can be employed exclusively in Chapter VI operations on in humanitarian missions. SHIRBRIG has been preparing for this mission for some time, with common training activities of growing intensity and, furthermore, is considering to adopt organization modules which, as concerns capabilities, should fit the envisaged requirements of employment.

Its chain of command is subordinate to a Steering Committee, tasked with the politico-military decisions related to planning and programming while the indispensable link with the UN is provided by a Contact Group, whose members are the National Representatives to the United Nations.

From the organization point of view, the Major Unit has a classic configuration, with battalion-level manoeuvre units and tactical supports, capable of giving the Commander a reasonable freedom of action and, above all, sufficient to guarantee a comfortable redundancy in case of non-participation of individual Nations. Also the Staff has a classic configuration and, as we said, all jobs are generally rotated among the Nations. However, there are still some limitations, both as regards liaisons with the subordinate units and the Brigade-level logistic support, consisting, at present, of a limited capability of transport.

In view of this, while the problem of communications has been partially solved with various technical measures, the Brigade's scarcity of logistic resources (an important problem, considering that the UN would be unable to deliver any support to a Theatre before 60 days) is now being overcome, on the one hand,



because the national contingents have reached a complete self-sufficiency and, on the other, because some Countries have the responsibility for one or more common activities (Role-specialist Nations), coordinated through a Brigade Logistic Coordination Centre (BLCC).

In the picture just outlined, the considerable Italian participation is ensured by a "framework" manoeuvre Regiment, with adequate tactical and logistic supports and backed up by a suitable number of staff elements within the Command of the

formation.

In addition to this important commitment, there is a significant contribution by the "Carabinieri", present with a "framework" company which, as a component of the Force's Military Police, is capable of expressing technological capabilities almost unknown to the other Armies.

As regards the employment, once the conditions for the intervention are verified -- Security Council resolution, UN mandate within the limits of Chapter VI, agreement among the participating Nations, preventive

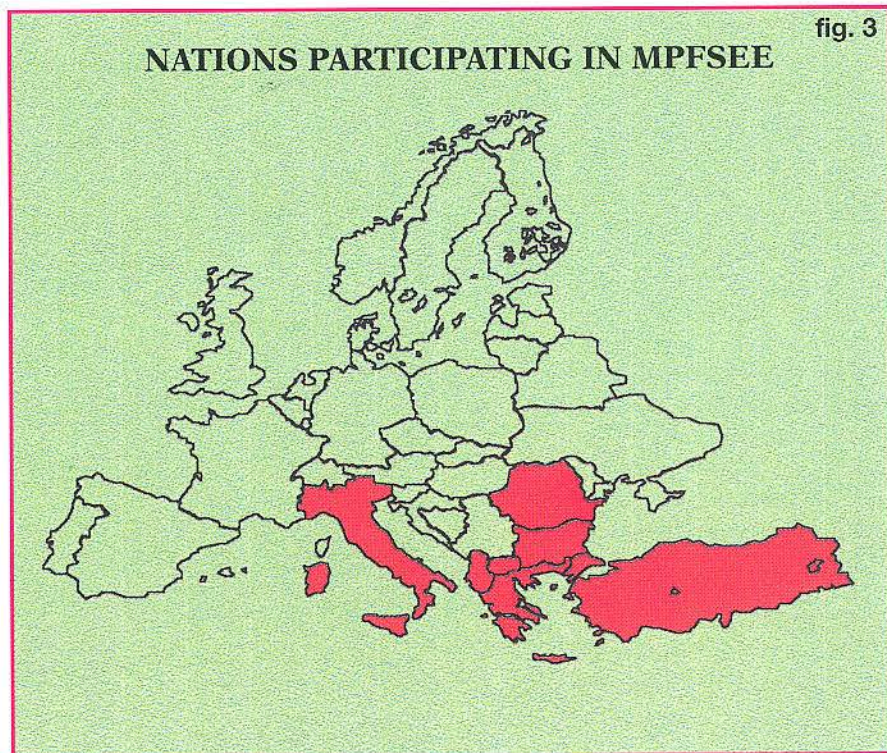
accord between the conflicting Parties and their agreement to the presence of the Peace Force - and after completing the activity of Force Generation, SHIRBRIG deploys in the Operation Zone and becomes subordinate to the Special Representative of the Secretary General as a military component of the UN mission in the Theatre. In this capacity, it will perform tasks of reconnaissance/surveillance, interposition, protection and escort, local defence and road security as well as humanitarian aid, making sure not to indulge in the temptation (its own or others') of escalating the mandate given to the Unit, since this would require a specific decision of the politico-military level.

However, in this respect, and moving to the evolutionary aspects of the formation, one cannot but note that the actual possibilities of employment of SHIRBRIG are for the moment rather limited, since the prevailing scenarios seem to have an increased need of mandates stronger than those envisaged by Chapter VI of the UN Charter.

It will also be convenient to further the consensus about the Force, stressing its spirit and its intentions, also in order to dispel any suspicion that some Nations want to play a leading role to the detriment of others. In this regard, however, it is comforting to note the growing interest aroused by SHIRBRIG within the United Nations, on the occasion of the recently started direct negotiations on the procedures of the Unit's activation. This interest is directly related to the possibility of having on hand, at last, an efficient instrument for rapid interventions.

MPFSEE (MULTINATIONAL PEACE FORCE SOUTH EASTERN EUROPE)

Also known as SEEBRIG, this unit is a multinational military



initiative whose purpose is to achieve sub-regional stability in South Eastern Europe, developed within SEDM (South Eastern Europe Defence Ministerial). Created in the spirit of NATO's EAPC (Euro Atlantic Partnership Council) and Partnership for Peace, it is an important step towards the end of the pre-existing regional disputes and, at the same time, represents a special vehicle for approaching the Countries wishing to join the Atlantic Alliance.

The formation includes Albania, Bulgaria, FYROM, Greece, Italy, Rumania and Turkey, as full-fledged members, while the US and Slovenia hold the status of observers (Fig.3).

Established in 1996 on the basis of a Turkish initiative which Italy joined in 1998, MPFSEE is a Brigade-level Major Unit, consisting of predetermined national units, whose participation is decided according to need.

Directed by a multinational Command whose location and tasks follow pre-established rotations and at present located in Bulgaria, the unit is employable, on

principle, in Chapter VI or humanitarian missions, within UN, OSCE, NATO, WEU contexts, or even autonomously in Theatres not determined *a-priori* but coinciding with the sphere of interest of the participating Nations. The necessary preparation commenced in 1999 with common intensive training activities.

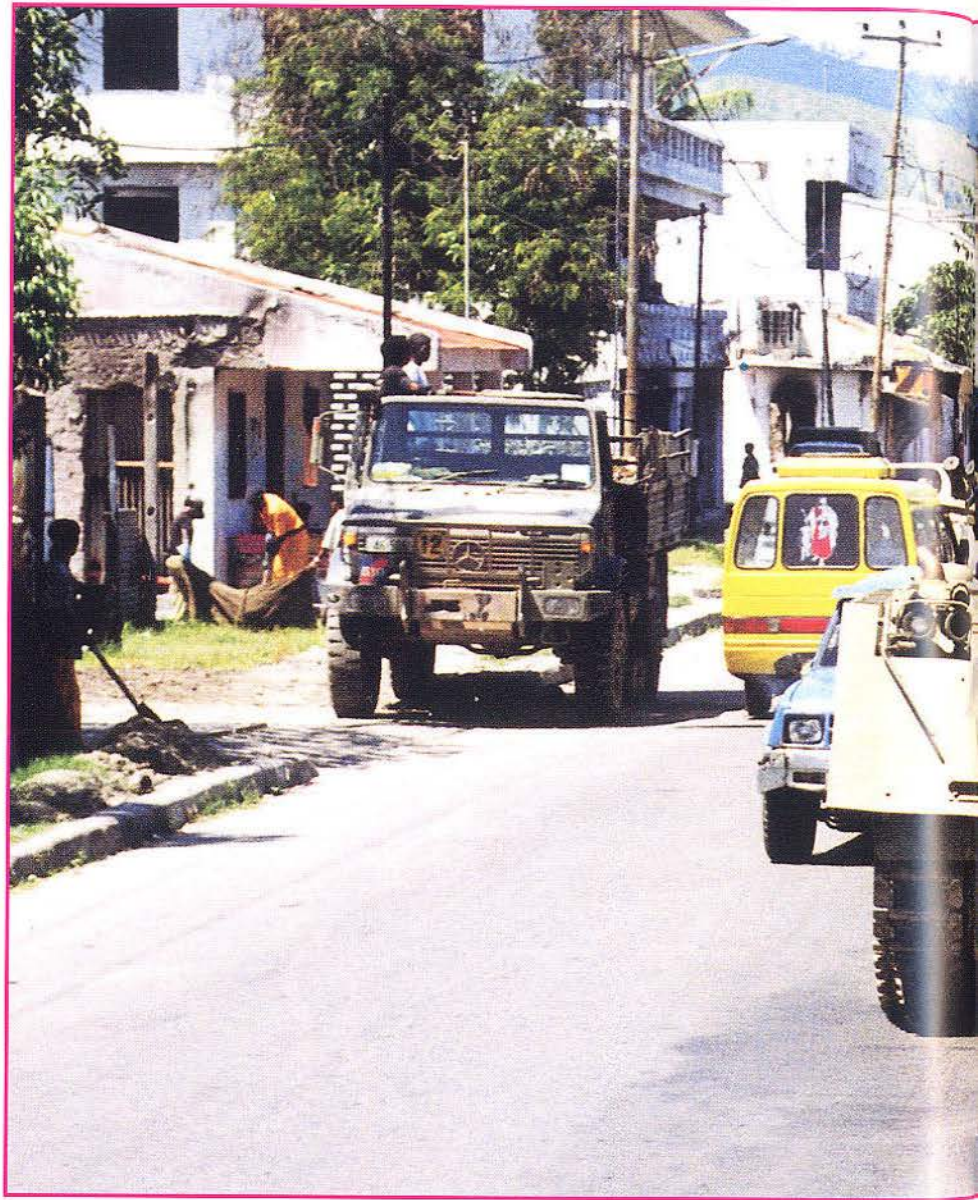
Like SHIRBRIG, also MPFSEE is subordinate to a politico-military Steering Committee, responsible for plans and programs, as well as for liaisons with the corresponding bodies of the Member Nations.

The unit's organizational structure appears to be more substantial than the structure of the formation destined to the UN and, as we shall see later, can significantly influence its options of employment.

MPFSEE includes an adequate number of robust manoeuvre units with a full availability of supports, mostly directly subordinate to the unit even before the interventions and sufficient to ensure to the Commander - supported by a full-bodied Staff - a great tactical and logistic autonomy in any situation.

From the Italian point of view, the contribution to the formation, as significant as that of the other Nations, is provided, also in this case, by a "framework" manoeuvre Regiment with the appropriate tactical and logistic supports, and the presence of an adequate number of representatives within the Brigade Staff. Furthermore, of particular importance is the inclusion in the Italian contingent of the Albanian and Macedonian components of the Force, both at company level.

As we have seen, MPFSEE can be engaged in the UN and OSCE framework, or within division-level NATO/WEU formations for peacekeeping, peacemaking and peacebuilding missions, as well as in humanitarian operations, carrying out the typical tasks of reconnaissance and surveillance, protection and escorts, local defence and road-security. Nevertheless, in line with the Statutes, the Major Unit - unlike SHIRBRIG - can also conduct low-intensity operations, albeit limited to the acceptance of a tactical and well localized risk. Therefore, the solidity of the organization is justified, since it permits the Unit to face, with sufficient flexibility, also situations at the extreme limits of Chapter VI. On the other hand, MPFSEE cannot absolutely take the liberty



Patrolling and Check Point activities of Italian soldiers on duty with the INTERFET mission.



to exceed those limits without a specific decision of its politico-military level.

In addition to the aspects outlined so far, and with particular reference to the concrete and substantial contribution already given to the constitution of the formation, it is in the evolutionary aspects that we can see the participating Nations resolute will to further the mutual cooperation.

As a matter of fact, it was recently



decided to increase the capabilities of the Force, with the assignment of a component specialized in humanitarian emergencies, with special reference to natural disasters, rather frequent in the natural area of gravitation of the Unit. This new component, called "Engineer Task Force", and established within MPFSEE in an emergency, will consist of Engineer units made available by the Nations when necessary. In addition, as regards information, the new Force will be supported by a "Communications and Information Network" (CIN), based on the architecture of the pre-existing "Information Management

System" of "Partnership for Peace" (PIMS).

MLF (MULTINATIONAL LAND FORCE)

The Multinational Land Force originates from an agreement for collective security and cooperation concluded, on Italian initiative, with Slovenia and Hungary. The agreement, technically completed in 1999, falls within the province of "Partnership for Peace" and "Central European Initiative" and is therefore open to new applicants (6). Its basic goals are: to give an effective military response at the

onset of crises, to exert an effective deterrent action against potential threats and, last, to directly manage the crises by projecting its forces. Within this framework, moreover, the stress is laid on the development of interoperability, as a fundamental prerequisite for the accomplishment of the tasks assigned. On the other hand, the Nations are completely free to decide about their participation in the Force's activities, including deployment.

In general terms, MLF is a Brigade-level Major Unit, built on an Italian frame with the contribution of the other Nations, approximately equal to a Regiment.



Subordinate to a politico-military Steering Group but - unlike the other initiatives examined so far - also organized for the execution of Petersberg-type collective-security missions, the formation is suited for the employment in Central and Southeastern Europe, preferably on impervious terrain and in difficult operational environments.

The Force - which will be centred on the Headquarters of the "Julia" alpine Brigade and relevant supports plus a national manoeuvre Regiment - besides the already mentioned Slovenian and Hungarian contributions -- will have a rather sturdy composition, a wide tactical/logistic autonomy, and will be guided by a permanent multinational staff. The organizational activities, including the progressive acquisition of an acceptable degree of interoperability among the different national components, are currently under way.

MLF will be available, in principle, for employment with the UN, OSCE, NATO or WEU, for

the execution of humanitarian-aid, Peace-support and - an absolute novelty in the picture outlined so far - also for "real combat" missions. In this sense, it is envisaged, in case of deployment, that the Transfer of Authority (ToA) of the forces assigned should precede the introduction in the Theatre. This measure would permit a-priori an adequate amalgamation of the forces in the event of a mandate more exacting than usual.

Besides the repeatedly mentioned tasks traditionally entrusted to the Peace Forces, MLF deals also with the evacuation of endangered communities and peace-enforcing conventional operations which, from the viewpoint of the employment and the ensuing national engagement, certainly place this Unit in a pre-eminent position, compared to the multinational initiatives described above - And, if we add the special importance that this Unit can assume within the regional balances in which Italy is directly concerned, we can rightly say that its constitution, for the Italian

Army, will be "a challenge within a challenge".

Moreover this formation, considering its spirit and its intent, will be able to give a concrete and credible contribution to the construction of the southern component of the European pillar of security and defence.

CONCLUSIONS

This brief survey of the new and recently established Multinational Forces, and of the conceptual elements at the basis of our participation in them, does not claim to be exhaustive at all, since many more aspects would be worthy of further examination. Here, the intention was simply to unveil a world - perhaps not very well known - which, in every respect, represents the new frontier of the Italian land instrument, A variable-geometry instrument, one should say, considering the different nature of the formations and the consequent increasing engagement required

Facing page.
Italian Check Point in East Timor.

Right.
During the INTERFET mission,
relations with the population have
always been very friendly.

by each of them, in direct proportion to the order in which we described them. In the final analysis, this is another challenge for the Army, a challenge which seems to require an effort even stronger than the present one, not only in terms of mere presence on the international scene but, first of all, in terms of integrability within the multinational contexts. Nevertheless, it is an effort that the Army cannot evade if we want Italy to play, in Europe and in the world, the role we all wish for our Country.

□

** Lieutenant Colonel,*
Plans Office,
Army General Staff

NOTES

- (1) Stand-by High Readiness Brigade for the United Nations.
- (2) Multinational Peace Force South Eastern Europe.
- (3) Multinational Land Force.
- (4) Italy accepted to contribute to this formation - consisting at present of approximately 80,000 men from several Nations - with 2 manoeuvre Regiments and their tactical and logistic supports, as well as with Air Force and Navy assets.
- (5) In this sense, a recent statement made by the UN Secretary General (Bangkok, February 11, 2000) is very enlightening. He compared UNSAS to a bill which is not always honoured as it should be and called for the establishment of a UN effective capability of rapid reactions citing SHIRBRIG as an example to pursue.
- (6) In this respect, some neighbouring Nations have already manifested their interest.
- (7) The Petersberg Declaration (June

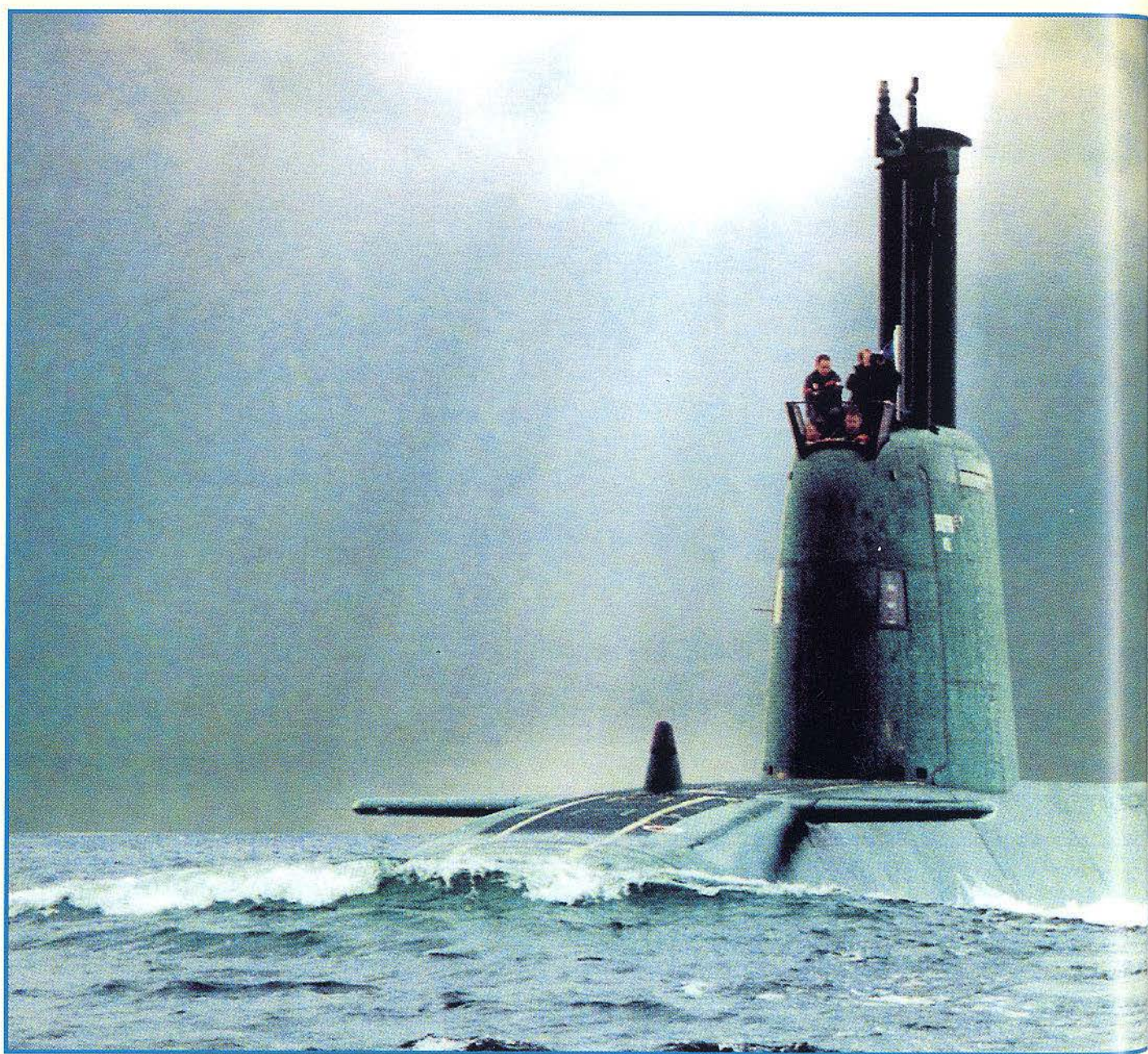


19, 1992) is at the centre of the process which will lead to the development of WEU as a component of the EU Defence, and as an instrument aimed at strengthening the European pillar of NATO. The three parts of the Declaration establish the guidelines for the future development of the Organization. The member Nations declare their willingness to put at WEU's disposal a number of military units taken from their conventional forces, in order to conduct military missions under the authority of WEU.

These missions have been specified as follows: besides the contribution to common defence in pursuance of Art.5 of the Washington Treaty and Art.V of the Brussels Treaty (modified), the military units of the member Nations could be employed for humanitarian missions or evacuation of persons, peacekeeping and crisis-management missions, including peace-enforcing operations. The so-called "Petersberg missions" have been included by the Amsterdam Treaty in the new Art. 17 of the European-Union Treaty.

WEAPONS OF MASS DESTRUCTION AT THE END OF THE 20th CENTURY

by Luigi Semprini*



Possible spinoffs of the proliferation of weapons of mass destruction are difficult to foresee due to the uncertainties of the newly born millennium geostrategic scenario. However it is possible to hypothesize that the impact of the proliferation of weapons of mass destruction on global politics will increasingly weaken, provided that leading countries strengthen the initiative to rapidly react against any violation of international accords.

At the end of the 19th century, in the Hague, leading countries, scared by the lethality of asphyxiants, signed a Convention prohibiting their use in wartime.

It was the first international agreement against the use of a modern mass destruction weapon which was openly violated during the 1st World War.

In 1925, the horror at the massacres caused by asphyxiants urged the ratification of a new agreement which prohibited countries from using but not possessing them; it was an ambiguous formula which opened the way to new violations such as, for instance, Iraq's chemical attacks against Iran and Kurds.

Biological agents, whose presence and effects are difficult to identify, added to chemical agents; so far only few indications show that they have been used by Japan against China during World War II and by Saddam Hussein during the Gulf War. In 1972, a Convention was signed to outlaw biological agents but it didn't include coercing clauses.

The birth of the atomic weapon and the growing tension during the Cold War resulted in the creation and growth of powerful

nuclear arsenals both in the USA and in the USSR generating an escalating balance of terror. When tension started de-escalating, the two Super Powers started negotiations with the aim of checking the capabilities of their respective nuclear arsenals and preventing other countries from possessing nuclear weapons. It was the first effort ever to establish rules to stop vertical and horizontal nuclear proliferation.

Both the US and the USSR could then gather a wide consensus on the agreements reached, which led to the signing of the non proliferation Treaty (NPT) by 120 countries in 1970 (France and China were conspicuous by their absence). Many other countries signed the Treaty later on and there were few defections.

Many Countries joined in, to seize the political opportunity to become a "partner" in an important Treaty more than to openly fight the Weapons of Mass Destruction.

The NPT is today considered as a incoherent set of antiproliferation rules established by the USA - USSR to institutionalize and legitimize their nuclear dual supremacy which was only justified by the way things stood. And it turned out to be a very poor instrument for controlling international policies of Nations, as when France and China became "partners" in the Treaty as nuclear powers, only after secretly acquiring nuclear weapons.

Nevertheless, the international community made use of this Treaty, though having a limited coercive power, to impose on violating Nations censure and sanctions whose effectiveness has often been disappointing. After the end of the US - USSR dual supremacy, these two powers were no longer able to control their respective allied and friendly Nations as in the past; so the threat was felt of a growing horizontal proliferation

in those countries were WMD where still considered as the ideal means to fulfill security requirements or regional dominance ambitions. Subsequent historical events dissipated all fears and since the Russian *glasnost* no Country has launched new programs to develop NBC weapons.

In those years there were even signs of a decrease in the proliferation process: South Africa gave up its atomic arsenal and adhered to the IAEA inspection regulations and to the denuclearization of Southern

arsenal of the USA and of the former USSR (START 1 Treaty) and the negotiation of further accords which would lead to the reduction of the START 1 "ceilings" by 1/3 and to more strict inspection and control rules (START II Treaty); unfortunately, conflicts in Kosovo and in Chechnya have put off the ratification of the second Treaty by the Russian Duma for seven years. It was ratified last April following Mr Putin's election as president of the Russian Federation.

After the collapse of the URSS, the

Treaty (April 1995). On that occasion, the effective US mediation successfully settled all controversies and the NPT was unanimously renewed indefinitely. This success was achieved by mitigating the Treaty with a number of undefined commitments on nuclear disarmament to be met by the five official nuclear powers.

India, Pakistan and Israel were not convinced and kept on rejecting the Treaty, considering the nuclear weapon as the most important safeguard for their security.

In the mid 90s, the conventions on chemical and biological weapons were also renewed in more restrictive terms: chemical weapons were outlawed (it was forbidden to possess and use them); as for biological weapons, more effective and careful inspections were foreseen, provided that they do not break the secrecy of the industrial and scientific research.

The outcome of the great development of space technology in the last decade (GPS, etc.) was the proliferation of missile delivery systems (ideal for NBC attacks) in many Countries despite the prohibition laid down in the Treaty on the Missile Technology Control Regime (MTCR) in force since 1987. New missile systems - whose accuracy and range have been greatly enhanced - should still be in the hands of the producing Countries, but obviously they will be unlawfully and dangerously commercialized in a short time.

These Treaties whose interdiction power has been strengthened, are unlikely to dispel the risks of existing WMD and of the latent proliferation trends, but they will at least be an effective legal support for controls/inspections that the international community will start to limit said risks.

CURRENT THREAT SCENARIO

Uncertainties on the deterrence



Testing the EKV space interceptor from the Kwajalein atoll.

Africa; Brazil, Argentina, Chile and Cuba accepted to be submitted to IAEA inspections and signed the Tlatelolco Treaty against WMD proliferation in Latin America. This change of attitude in South Africa was undoubtedly contingent on the imminent end of the apartheid and on the fear of leaving a military nuclear power dangerous and difficult to manage in the hands of Nelson Mandela.

This period of détente promoted the reduction by 1/3 of the nuclear

suspicion aroused that the former Soviet republics of Ukraine, Belorussia and Kazakstan were aiming at taking possession of the atomic weapons left within their national territories to join the nuclear powers' club. But a number of accords signed by said republics with the USA and Russia dispelled this suspicion.

However, the intervention of the UN to neutralize Baghdad's WMD programs proved to be less effective.

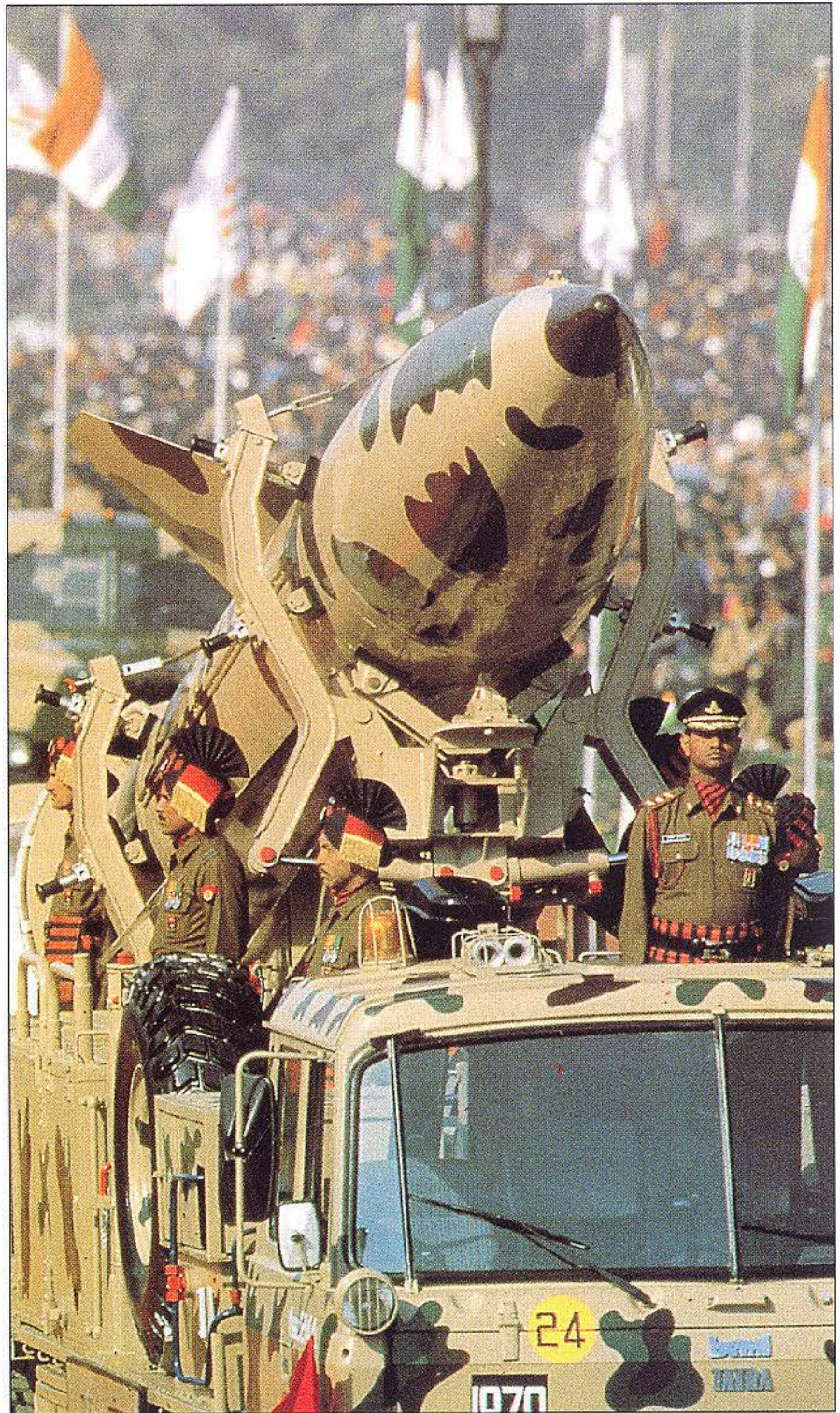
Old polemics on nuclear military power were triggered again 25 years after the signing of the NPT, in particular during the New York Conference for the renewal of the

Indian short-range ballistic missile "Prithvi" reportedly capable of carrying a nuclear warhead.

capabilities of large nuclear arsenals arose during the war in Kosovo: Moscow was disappointed to realize that its nuclear kill capability could not deter NATO from bombing Yugoslavia; the only non conventional chemical retaliation was planned by the Serbs in the case of an offensive land operation by NATO troops. Russia was also disappointed because the US Senate did not ratify the nuclear Test Ban Treaty and the Pentagon showed a growing interest in antimissile systems, whose development is still subject to the constraints laid down in the ABM Treaty back in 1972.

In the light of this situation, the Kremlin is now trying to find out new politico-strategic foundations for the employment of nuclear weapons so as to give new credibility to its deterrence. The Russian Ministry of Defense, Igor Sergeyev, on the basis of the new NATO doctrine providing for out-of-area deployments, has already started revising many possible options concerning military security and has hypothesized a strategy based on very limited nuclear attacks to be performed using mini tactical nuclear weapons which, he thinks, should not be listed among WMD.

This hypothesis is confirmed by the Chinese Newspaper "People's Daily" in an article stating that reportedly the Russians have planned to produce 10,000 superminiaturized tactical nuclear warheads to carry out surgical attacks against targets all around the world, to avoid the risk of a large scale nuclear war. If, unluckily, the conflict escalated, the Russians would be able to rapidly replace tactical nuclear warheads with strategic ones. The idea of giving new credibility to the Russian nuclear arsenal by openly employing a non conventional weapon - though



downscaled to a mini weapon - is upsetting, as nuclear deterrence requirements cannot be so easily modified.

Russia will certainly try to develop strategies more adequate to its role of superpower interested in worldwide stability and in the recovery of its economy; it can

always resort to the great potentialities of its nuclear arsenal still capable of arousing respect and fear (apparently 10 new nuclear multiple warhead missiles have recently entered into service), but actually it is not in the position of planning such alarming strategies.



French ballistic-missile launcher nuclear submarine "Triomphant" equipped with 16 SLBM M-45 missiles.

proclaim themselves as nuclear powers.

The emerging Indian nuclear power should play a deterrent role towards the threats coming not only from Pakistan but also from other Asiatic Countries and mainly from the People's Republic of China. As for China, anyway, it is an over-ambitious comparison, given the existing difference between the reduced "Indian minimum credible deterrence" and the so-called "Chinese limited deterrence" which is only apparently reduced as it is capable of adequately responding to the various operational options hyphotesized by Beijing in case of war, including a pre-emptive attack (China rejected the no first use).

Pakistan by self proclaiming itself nuclear state - for debatable security reasons - had the great merit of making the dream of the islamic bomb come true, despite Israeli and US efforts to make it impossible, thus succeeding in gaining a higher prestige within the islamic world and in moderating internal fundamentalist movements by orientating them against the external enemy (India and Russia).

The Sheikh of the Islamic university "Al Azhar" in Cairo tried to emphasize the importance of the Pakistani islamic bomb - finding its legitimization in a verse of the Koran - though without gathering wide consensus. Even the Egyptian government ignored him, being mainly concerned no longer about Israel and its nuclear bombs but about other and more important challenges.

Egypt's commitment is to greatly develop its economy and upgrade its conventional military assets (with the help of the USA) to prevent its leading role within the Arab world from being impaired by such events as Iran's great development in the military

Today, the Russian leadership pragmatically prefers to rely on foreign partnerships (China, etc.) which are certainly more helpful in implementing its foreign and home policy and in rejecting Western criticism on the Chechen issue.

Nuclear tests carried out in Pakistan and India in 1998 defying usual international censure set back the non proliferation cause. These tests enabled the two countries to successfully develop their own nuclear bombs and

nuclear sector; Pakistan's accords with the USA and Israel, the alliance between Turkey and Israel and so on. Egypt rejects the nuclear weapon option - economically unsustainable and detrimental to its relations with the Western world- while considering it unacceptable that Egypt's role as regional power be undervalued by the Western World which in turn establishes relations with Turkey, Israel and Pakistan.

Apart from its paradoxical religious meaning and its impact on the internal situation, the Pakistani nuclear bomb has actually a low deterrent effect; it is enough to recall that a pre-emptive or retaliation nuclear attack against India could not be a mass attack because, as the Indian territory is too wide, it would be a suicide. On the contrary, an Indian pre-emptive nuclear attack against Pakistan would be a crime, as India could win by simply using its conventional forces.

In both cases, both losses and damage would be extremely high due to retaliation actions from both sides and also to possible external military interventions.

India and Pakistan, after declaring themselves nuclear states, accepted the invitation of the USA to take part in a strategic dialogue which then developed very ambiguously: Washington tried to persuade both Countries to stop their race to WMD and related launchers and to at least sign the Comprehensive Test Ban Treaty (CTBT) and Fissile Material Cut-Off Treaty (FMCT); New Delhi and Islamabad ducked the proposal expressing worries for their security, only to obtain the scaling down of economic sanctions and the supply of dual use technologies.

The Indian - Pakistani race to military nuclear power is, after all, only an irrational choice given the inconsistency of the security needs of the two countries and above all the contradiction between the high costs of this race and the

miserable living conditions of most of their nationals.

MISSILE PROLIFERATION AND ANTIMISSILE MISSILES

The unconceivable developments of space technology confronted many Nations with a hard choice, that is, to keep up enhancing missile offensive capabilities or focus on the development of anti-missile systems capable of neutralizing any kind of missile attack.

Russia, though facing an economic crisis, keeps on upgrading its offensive missile system and also China is making similar efforts for regional dominance purpose. Even North Korea has made disquieting developments as for nuclear missiles following the experimental launch of the missile "Taepodong 1" (whose range is 1,500 km) which has been passed off as a satellite launcher and the steps forward made by the development program of the "Taepodong 2" missile (whose range is 6,000km), capable of hitting the Hawaii Islands and Alaska.

Japan, the country most exposed to these threats, has decided to face them by passing a law which authorized the support of US military operations in Asia, by

signing an accord with the USA on the development of an anti-missile system and by establishing friendly relations and economic cooperation with South Korea.

The USA and China have blamed each other for the "Teapodong 2": America has accused China for being reluctant to urge North Korea to limit its missile programs and exports and China has responded expressing its fears for technologies and anti-missile systems which the USA is willing to export to Asiatic allied countries and in particular to Taiwan.

Madeleine Albright, polemically invited China not to worry about the diffusion of a defensive technology still under study and to focus its attention on the source of the problem: missile proliferation.

Russia and China are apparently not interested in the development of anti-missile shields considered as a violation of the 1972 ABM Treaty which could be lethal to international stability.

Obviously the drastic limitations to the development of American and Soviet anti-missile systems laid down by that Treaty were consistent with the bipolar rationale behind the cold war

Russian long range missile system on "Gladiator/Giant" S-300V tracked vehicle.



MAIN INTERNATIONAL ACCORDS ON WEAPONS OF MASS DESTRUCTION

1899

The Hague Convention - ban on asphyxiants in wartime

1925

Convention banning the use but non the possession of all chemical agents

1925

Geneva Protocol on the control of chemical-biological armaments

1961

Treaty on the total demilitarization of the Antartic continent

1963

Partial Test Ban Treaty (PTBT)

1968

Tlatelolco Treaty on nuclear weapons in Latin America

1970

Non -Proliferation Treaty (NTP)

1972

Convention on toxic and biological weapons

1972

Anti Ballistic Missile Treaty (ABM)

1972

Strategic Arms Limitation Treaty (SALT 1)

1974

US -USSR Threshold Test -Ban Treaty (TTBT)

1976

US -USSR Underground Non-military Test Treaty

1977

5 NWS Agreement on nuclear materiel, equipment and technologies trasfer

1979

Strategic Arms Limitation Treaty (SALT 2)

1986

Rarotonga Treaty - ban on nuclear weapons in South Pacific

1987

G7 agreement on the Missile Technology Control Regime (MTCR)

1987

Convention on nuclear material protection

1991

US-USSR Strategic Arms Reduction Treaty (START 1)

1992

Lisbon Protocol on Belorussia, Ukraine and Kazakstan denuclearization

1993

Chemical Weapons Convention (CWC)

1993

Comprehensive Test Ban Treaty (CTBT)

1994

Intermediate Nuclear Forces Ban Treaty (INF)

1994

US-USSR Agreement on inspections of nuclear-warheads plutonium stockpiling sites

1995

Non-Proliferation Treaty sine die renewal

1996

Renewal of the Biological Weapons Convention

based on a cruel balance of terror (mutual destruction guaranteed): this kind of balance had warded off the danger of a Third World War and the use of the nuclear weapon by nuclear States linked to the Superpowers by alliance or friendship ties.

At the end of the cold war, limitations imposed by the ABM Treaty seemed ridiculous, as the balance of terror with its stabilizing effect had collapsed and new threats, difficult to deter and counter, had appearead. These threats can come from "rogue" nations such as North Korea, Iran, Iraq and Libya impatient to acquire, missile systems capable of hitting the heart of Europe and the USA in a relatively short time (5-10 years).

Moscow pretends to ignore new threats and still endorses the reasons that justified the limitations to anti-missile systems in 1972. It persists in crediting the ABM Treaty as the cornerstone of the global stability, which cannot be questioned without violating the commitments taken after the World War II, thus denying any right to self- defence against new or old missile threats.

This extremist attitude can be seen as the ultimate Russian effort to safeguard the great attack capabilities of its missile arsenal, at least until it will be able to parry any possible missile attack with an adequate shield.

In this perspective, the USA is committed as never before in the development of anti-missile technologies without economizing and getting discouraged when the outcome of some tests does not live up to expectations. Many European countries and in particular Central and Southern European ones are increasingly interested in what is happening on the other side of the ocean, as they feel increasingly exposed to possible threats of missile attacks coming from the South-east; a small number of North-Korean medium range "Nodong" missile systems (approx 2,000 km range)

in the hands of Libya or Syria could project the threat of non conventional attacks to Central and Southern Europe.

A sophisticated defensive system capable of parrying said threats is of great military and technological interest, but also arouses a few doubts for its prohibitive costs. The estimated cost of the continental US anti-missile defensive system ranges from 11 to 13 billion dollars.

SOME REMARKS

The memory of the massacres and the fear of non conventional weapons used in the previous century has inspired us to make some remarks on the origin and effects of proliferation as well as on the assumption of their ineluctability.

Security is the usual alibi for acquiring WMD and in the current global situation it is an alibi which could be only accepted in the case of India against China, Pakistan against India, Israel against the Arab world, Syria against Israel and Iraq, Iran against Iraq and vice versa.

On the contrary, it is to be condemned with no mitigating circumstances any proliferation initiative inspired by reasons of prestige and status, which can only be the goal of an unstable, ambitious, totalitarian and illegal government driven by the aim of conquering targets beyond its real capabilities. It is still difficult to forget the old cliché according to which when a Nation gets WMD it also acquires threatening power and prestige (a prize for a negative value).

Since the most important nations lost their monopoly over nuclear power, there has been the risk that a Country may acquire a non conventional weapon and use it for terrorist activities, employing sub-national entities operating outside its boundaries. Traditional deterrent or defensive methods adopted by Nations or Alliances among nations

ACRONYMS

ABM - Anti Ballistic Missile

BWC - Biological Weapons Convention

CTBT - Comprehensive Test Ban Treaty

CWC - Chemical Weapons Convention

FMCT - Fissile Material Cut-off Treaty

GPS - Global Positioning System

IAEA - International Atomic Energy Agency

MTCR - Missile Technology Control Regime

NPT -Non Proliferation Treaty

NWS - Nuclear Weapons State

PCR - People's Republic of China

START - Strategic Arms Reduction Talks/Treaty

WMD - Weapons of Mass Destruction

are obviously ineffective against this kind of threat.

There will also be the possibility of proliferation in areas under very special conditions or where endemic conflicts can escalate to a war or rogue dictators follow unreasonable enlargement schemes. Proliferation is easier when the rules on transfer of technologies are violated and when certain countries follow an imprudent weapon sale policy. Inspections carried out by the UN in Iraq confirmed this trend.

To effectively re-launch the non proliferation policy it is absolutely necessary to find out and employ the right means and strategies necessary to enforce peace in war-torn areas and isolate possible "rogue nations" by limiting their military options. It is also necessary to strictly control exports and to rely on the pressure, more or less open, that the Superpowers can put on untrustworthy Nations as well as on the influence of civilized States which reject WMD.

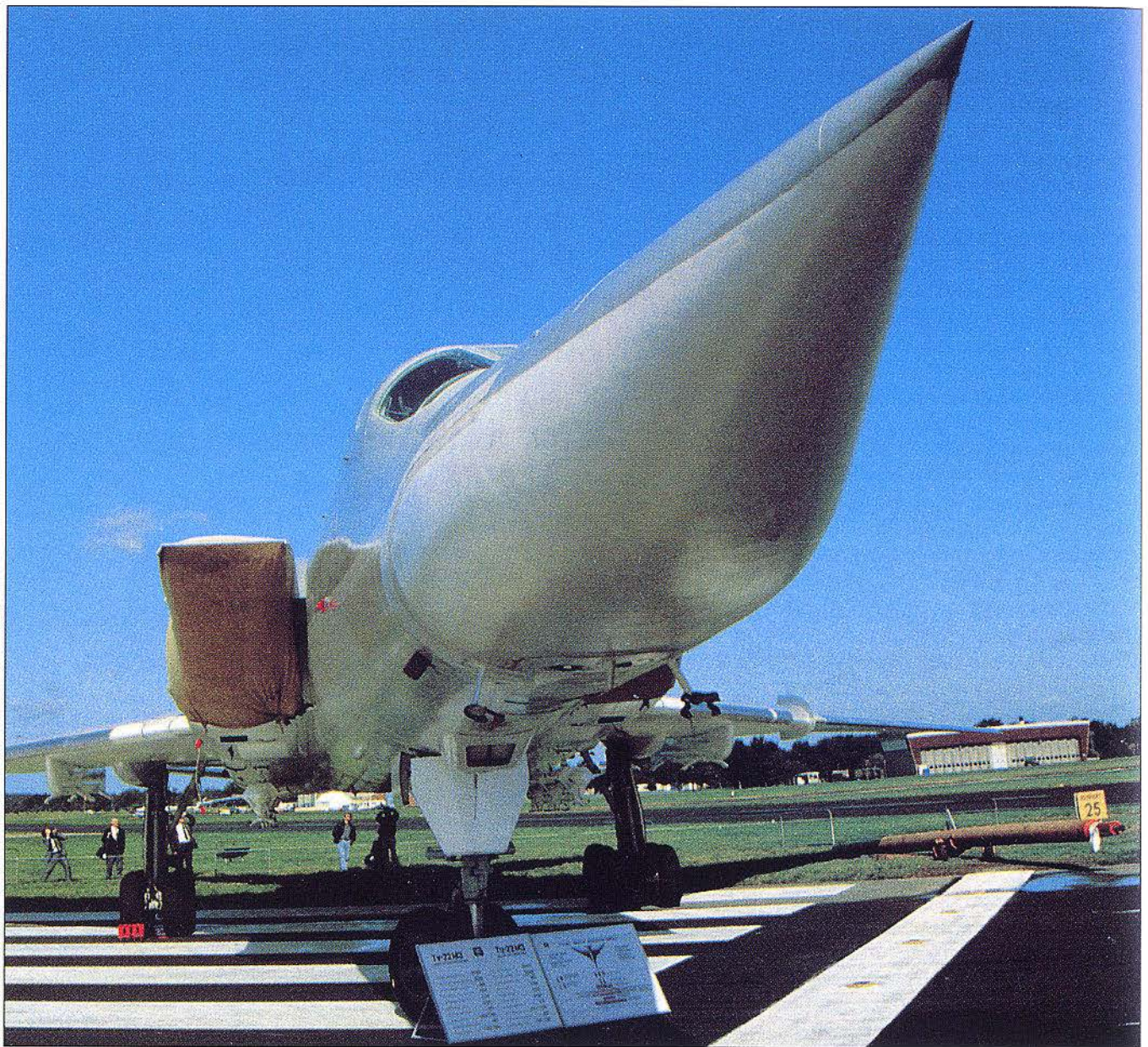
Notwithstanding the compulsory

international commitments laid down by new Treaties, many profit oriented countries such as the former Soviet Republics and China are still carrying out dangerous export activities. They even disregard physical security measures when exporting fissile material and dangerous chemical and biological substances.

First and foremost, two commonplaces must be disproved concerning material and technology exports, that is, the assumed uselessness of inspections, which sceptics define as "putting off the inevitable" and the preconceived mistrust in inspections whose officials can be easily deceived.

"Putting off the inevitable" is actually what is needed to implement ad-hoc diplomatic measures aiming at the collapse of a wicked regime. Iraq could have easily acquired necessary "dual use" technologies and material and even the nuclear weapon before the Gulf War if inspections had not been carried out.

Inspections are not a guarantee



Russian supersonic Bomber TU-22 M3 "Backfire".

but it would be a mistake not to carry them out even when they require difficult controls, as in the case of biological weapons.

Exegetes of proliferation phenomena tend to believe that their origin is the North-South conflict but perhaps they are influenced by remote analogies between East-West and North-South targets, as well as by the prejudice that all developing Countries want to possess WMD.

This line of thought is almost always wrong and self-defeating as governments in developing Countries are unstable and their intentions are not easily readable and also because the gap between the Northern and the Southern part of the world can be further widened.

If mutual confidence could replace suspicion, the number of countries which voluntarily give up any kind of proliferation option would remarkably increase. But this would not change the global balance as these Countries are so poor and undeveloped that they cannot afford to acquire even the

cheapest and simplest WMD.

We must be aware of the importance of the present situation for winning the battle against proliferation and appropriately evaluate the possible dangers represented by those Countries where the first simple chemical, pharmaceutical and nuclear plants are being built. This could lead some of their leaders to consider the possibility of acquiring certain WMD as realistic and promising.

The right antidote to this option can be a careful diplomatic policy aimed at persuading all countries that abiding by anti-proliferation rules is a contribute both to global

stability and to their internal security interests. South Africa, Sri Lanka and French-speaking African countries showed, that they were deeply convinced when they agreed to indefinitely renew the NPT, like many other countries which co-operated in strengthening the IAEA guarantees and the MTCR, in signing the new CWC and in amending the Convention on biological weapons.

The traditional feeling of mistrust between Northern and Southern countries has not yet faded away: nuclear Nations still try to defend their absurd privileges even if they run the risk of fuelling tensions in their relations with allied or partner countries. This has been confirmed by differences and misunderstandings within NATO, WEU and the UN on the enlargement of the NPT and on the occasion of French nuclear tests. Developing or non-aligned Countries still mistrust controls on exports which they do not consider crystal-clear; in fact they have been decided by Northern countries alone, without consulting Southern anti-proliferation nations, intolerant to inspections considered as an example of interference in their national sovereignty and useless for the effectiveness of the investigation. However, today's nuclear Nations had a similar attitude when they were subject to the same inspections.

Given this climate of mistrust, a country like Iran can gather consensus on the abolition of all controls but it would not be successful if the western world was more co-operative in supplying developing Countries with low cost technologies, abiding by IAEA guarantees and assets.

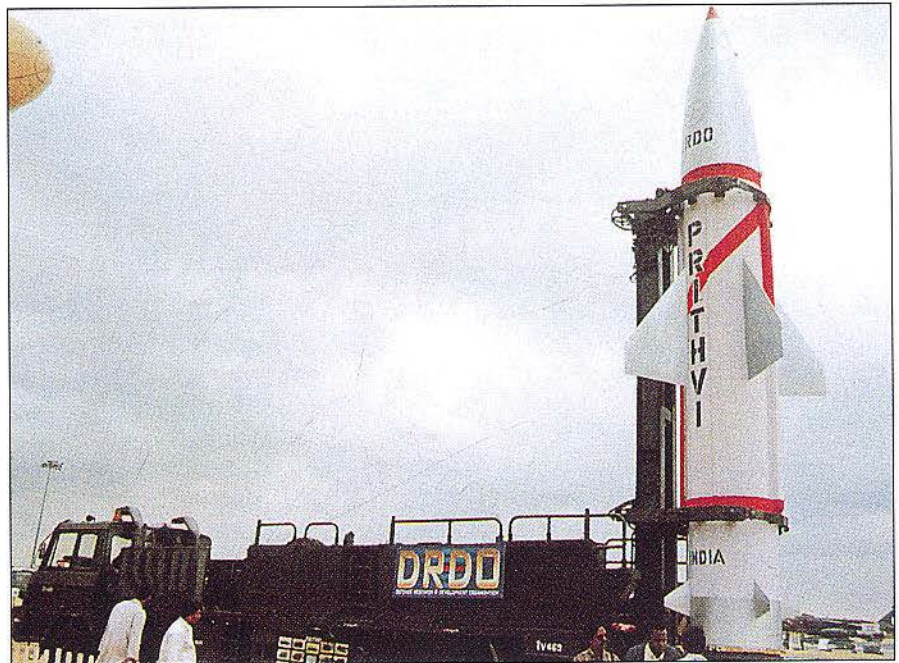
A debate on the North-South conflict, with reference to the WMD anti-proliferation rules, is therefore sterile and illogical. It is, therefore, necessary to start negotiating with the developing countries to avoid frictions resulting in dangerous alliances and to gather support in isolating transgressing countries.

The proliferation of non conventional weapons heavily impacts on international political balances, but the possession of these weapons does not automatically translate into an extra power. The UN Security Council standing members benefited from their privileged position even when some of them (USSR, China, France and Great Britain) had no nuclear weapons.

The Cold War bipolarism was based on traditional power factors (geography, population, technological and economic capabilities, organization, traditional armed forces, power projection) more than on the two super powers' mutually neutralizing nuclear weapons.

called proliferating nations: Israel's security heavily depends on its traditional superiority over near-by Arab Countries; India's international political importance remained the same after the nuclear tests performed in 1974 and 1998, but grew stronger when internal economic reforms were launched and its projection capabilities as a regional power were enhanced; Pakistan gained nothing from its nuclear activities and once the Soviets left Afghanistan was again marginalized; South-Africa, previously isolated by the

Indian ballistic missile "Prithvi" on Tatra 8X8 Launcher.



The USSR, despite its huge nuclear arsenal, collapsed because most of its traditional power factors deteriorated and today's Russia must resume them to be a leading nation again.

Great Britain and France are among the most important nations thanks to their legacy as world powers and to the geopolitical role they play in the EU context; nuclear weapons only partially contribute to their prestige.

Similar remarks apply to the so-

international community, gained prestige not only by abolishing the "apartheid" regime but also by giving up its limited nuclear arsenal.

On the contrary, Japan and Germany which oppose all WMD have gained an internationally leading position by rapidly projecting a state of the art technological power, though the USA is still the best at playing this game even at the cost of shouldering losses and high expenses.

It is difficult to judge the impact of



1,500 KM range Indian Intermediate - Range Ballistic Missile (IRBM) "AGNI".

WMD on the politico-strategic balance at regional level and evaluate their lasting deterrent effect. For example, Israel did not reach wide-range deterrent effects notwithstanding its mighty nuclear arsenal.

Two other good examples of unsuccessful regional deterrence and mutual nuclear deterrence are the clashes between China and USSR at the end of the '60s and between India and Pakistan at the end of the '90s.

The nation which has the regional monopoly of WMD has a remarkable blackmailing power, until its neighbouring countries try to neutralize it by acquiring non conventional weapons or establishing alliances with external powers. A good example is represented by the

Arab Countries which succeeded in neutralizing the Israeli nuclear capability first by allying with the USSR and then by acquiring chemical and biological weapons.

The reduced importance of non conventional weapons is confirmed by the fact that even those Nations which are trying to procure WMD invest large sums to acquire traditional weapons. Therefore, if non conventional weapons were politically and militarily decisive, a dual line of investment would be useless.

When vital interests are at stake, the possible presence of WMD does not hinder nations from carrying out military operations. In 1991 Iran was suspected of having chemical, bacteriological and even nuclear weapons but this did not prevent Western Allied countries from attacking it using conventional weapons only. Credible traditional options are absolutely necessary on occasions like these.

When analyzing the events of these last few decades, we have the feeling that nowadays the capability of communities of Nations to win economic and ecological challenges is a decisive factor in order to guarantee global stability and to project traditional forces far from their boundaries; the stabilizing role of WMD seems to be fading away.

The USA, Japan and the European Union will play a leading role in tackling the challenges of the near future.

CONCLUSIONS

At the beginning of this new century, even a short term hypothesis on the possible trend and future repercussions of WMD proliferation is risky, due to the uncertainties in the global politico-military scenario.

It is possible, though, to foresee

S-300 "Grumble" surface-to-air system for the strategic defence of Russia.

that the balance of power or the situation of strategically important regions will not be upset any longer, due to the increasingly reduced impact of WMD proliferation on global politics.

Possible proliferation choices may fuel conflicts - in which the Superpowers are more and more reluctant to intervene- or compel a nation or a Coalition of nations to take ad-hoc, even expensive countermeasures (e.g. anti-missile systems).

A risks is still there, not to be neglected, that WMD proliferation can help a "rogue" state to carry out blackmailing terroristic actions employing undefined criminal groups equipped with NBC agents. No military means so far has a deterrent capability against this kind of danger.

To delegitimize any new proliferation option it is absolutely necessary to revamp the downsizing process of large nuclear arsenals, starting from those "cuts" laid down in the START II Treaty, and, above all, to discuss the lawfulness of all non conventional arsenals so far legitimized by alleged security needs. Moreover, Countries abiding by non-proliferation regimes, should rely on their political leverage to call for rapid reactions against any possible violation and for large spectrum inspections which must be crystal clear and intrusive (confidence building effect). These measures are obviously more effective and less severe than military actions. If a military intervention is absolutely necessary, units earmarked to operate in possible non conventional environments should be equipped with high tech protection systems.

Each country should be given the right to protect itself with large anti-missile shields against missile proliferation risks. To this end it is necessary to revise the old



ABM Treaty which has become obsolete.

As during the Cold War, a counterproliferation option is to be ruled out together with the contraposition between Northern and Southern "non-proliferating" Countries.

Lastly, it is necessary to underline that existing international conventions (NPT, CWC, BWC, MTCR etc.) accepted, at least formally, by most of the Nations - including the five official nuclear powers - are based on the WMD

unlawfulness principle; therefore they could legitimize all actions aiming at strengthening global non proliferation regimes. Unfortunately, actions taken by the UN and the USA so far do not seem to have been very effective: the European Union should re-launch them and make them the pillar of its Common Foreign and Security Policy (CFSP).

□

* Lt. General (ret)

THE PARAMETERS OF POWER

by Vittorio Barbati *



Is it possible to "measure", with sufficient approximation, the power of a Nation or of a coalition? In other words, would it be possible to adopt certain "parameters" which, appropriately combined, could make this measurement possible?

Obviously, in the present conditions at least, a definite answer cannot be given. The possible variables are innumerable and often escape a precise definition.

This also because, in many cases, the variables are immaterial, and their weight cannot be defined exactly.

Despite all the illusions aroused by the end of the so-called "cold war", unfortunately the world continues to be dominated by more or less unmerciful force ratios.

In these conditions, the international weight of a Country or of a coalition continues, as always, to be determined by the political,

economic and military power that the Nation or coalition is able to express and, even more important, to use, in a peaceful or warlike manner, in order to achieve its goals. Therefore the even approximate calculation of this power - one's own or the possible enemies' - should provide (the conditional mood is compulsory) - valid indications to those who, in one way or another, are or could be called to make crucial decisions for their Countries.

Is it possible to “measure”, with sufficient approximation, the power of a Nation or of a coalition?

A definite answer to this question cannot be given.

The possible variables are innumerable and unpredictable.

Military power, apart from deterrence and strategic mobility, often depends on many immaterial factors connected with the culture, technological capabilities and institutional structure of the Nation.



one must take into consideration the average cultural level of the population; the prevailing type of culture (humanistic, technical, etc.); the professional training of the individuals in relation to the economic and productive structures; the adherence, convinced or forced, to the regime in power; the degree of psychological endurance under the hardships, dangers, damages and human losses deriving from a possible conflict; the prevailing political and ideological beliefs (authoritarianism, nationalism, political or politico-religious extremism, ethnic or tribal rivalries, intolerance against non-integrated minorities or, at the opposite end, deep-rooted democratic conceptions, tolerance, collaboration among different forces, cohesion of different populations, full integration of minorities).

But what meaning should be attributed to the word “power”? In general, only for the purposes of this study, it can be said that this term describes the actual capability of employing an adequate force - not necessarily military capability, but also economic, financial and political - in order to achieve precise objectives in the international arena.

Power is the result of many factors, both “immaterial” and

“material”, not exactly quantifiable, whose definition is very difficult. Equally difficult is the definition of the parameters necessary to calculate their weight with sufficient approximation.

The “immaterial” factors are numerous and complex. One can try to list them, but it should be kept in mind that the list cannot but be summary and incomplete (but useful, anyway, for the purposes of this analysis). For each Country,

Among the factors, in part “immaterial” and in part “material”, (where, often the two components merge) we can single out: the capability, correlated with the prevailing culture and the professional training of the individuals, of using more or less sophisticated tools and instruments for work and analyses; the ruling classes’ capability of correctly employing the moral and material resources available; the institutional,

political and administrative structures; the capability of fostering technological innovations both for civilian and military purposes.

And now the discussion shifts to the actual "material" factors, i.e. on those factors which, albeit with many limitations, represent the most visible, and therefore more measurable, part of the power of a Nation or of a coalition. In short, one can say that these factors coincide with the material resources available. The subject is very complex, and would deserve an ample and thorough discussion that, for obvious reasons, cannot be made here. The range of resources, including potential ones, is very wide: it goes from financial means available in public budgets and monetary reserves etc. to agricultural production, from raw materials to sources of primary energy, from research and experimentation centres to industrial installations, from infrastructure to transport systems, from telecommunications to acquired and acquirable technology. And the list could continue for a long time.

All these factors represent the background or, more precisely, the bearing structure, of the strictly military factors. How do they interact? Is it possible to calculate their weight? Actually these questions are two sides of the same coin. To evaluate, even very approximately, the weight of the factors which determine, or contribute to determine, the global power of a Nation or of a coalition, also means to take into account the synergies through which these factors strengthen each other. In this regard, a few examples could be useful.

The diffusion, particularly at high and intermediate levels, of a scientific-technological culture, can produce the best effects - especially as far as innovations are concerned - only if it is connected to research and experimentation structures that can provide a valid support



to the productive structures. Innovation, in fact, is not and cannot be an end in itself, since by now it affects all human activities: from schools to hospitals, from agriculture to industry and services.

Thus it is very difficult to select the best parameters for assessing the diffusion and influence of innovations.

An extensive recourse to statistical data can certainly permit - also through periodical comparisons - to single out special developments, as long as these data are correctly collected and interpreted, within a type of activity that the Anglo-Saxons define as "intelligence".

The employment of this kind of "intelligence" can concern all the surveys involving the power of Countries and coalitions: from those on the efficiency of the institutions to those on the use of

Above.

In-flight refuelling of a B-1B bomber. The USAF strategic bombers play a crucial role both for deterrence and for the capability of intervention at planetary range.

Facing page.

Innovation is today one of the main factors of power. This is exemplified here by the Objective Individual Combat Weapon (OICW).

resources, from imports to exports, from industrial alliances to mergers of companies etc. considering that, in the present context of economic globalization, no Country is now able to conduct a rigidly autarchic policy.

The discussion on the socio-economic factors of power and the methods for finding them could continue for a long time.



But now we can close it (we could possibly go back later to some particularly significant aspects), in order to tackle the issue of the military aspects of power.

Up to some decades ago, military power was calculated on the basis of precise but rather rough references: number of mobilized men (it was commonly believed that, in case of general mobilization, this number should correspond to about one-fifth of the population), guns (cannons, howitzers, mortars, etc.), tanks and armoured cars, ships (battleships, aircraft-carriers, cruisers, destroyers, torpedo-boats, light boats, submarines; at times,

also ships under construction were considered), different types of aircraft (fighters, bombers, attack aircraft and spotters).

On these bases, an approximate calculation could be attempted. This was justified by the fact that, at that time, the scientific technological-industrial gap between most advanced and less advanced Countries was not as deep (or even abysmal) as it is at the present time. Even in the first group, there is today a wide gap between the United States and the other Countries (in some sectors at least). So, since the analyzable factors were essentially related to quantities, they could be taken as parameters and elements of comparison, and used not only theoretically, but also when making decisions concerning foreign and military policy. But what are, or can be, today, the factors which determine a Country's or a coalition's military power and which can give us valid evaluation-parameters?

Besides the economic-financial ones, in my view, the basic factors of a Country or coalition's military power - meant as a component of global power - are two: technological innovation and organization.

We already mentioned innovation.

Now we should look at its military implications. It is well known, but it is better to stress it, that innovation is a dynamic process, which by now concerns all weapon systems and in many cases requires long periods (at times, fifteen or twenty years, or even longer). Therefore, the elaboration of the specifications by the General Staff is a very delicate undertaking and should be carried out keeping in mind as much as possible, besides the potential development of the projects, also the probable strategic and operational "scenarios" within which the systems will have to be employed (in either an active or in a deterrent function). And now our discussion shifts to the organization.

It must be stressed that we want

to attribute to this term a very wide meaning. At the basis of a rational organizational process there must be a strategic approach, coherent and projected into the future. The most advanced piece of equipment - be it a tank, a fighter plane, a ship, a ballistic missile - is of very little value if it is not included in an organic whole of systems, aimed at the achievement of well defined objectives. In this picture, the organization must be conceived, just like innovation, as a continuous dynamic process, based on some fundamental pillars and, in the first place, on carefully planned developments (obviously, without losing sight of the need to proceed with sufficient flexibility, in order to face unforeseen and unforeseeable events, be they positive or negative).

For study purposes, we can represent a standard organizational process, dividing it into phases (with the warning that this subdivision does not refer to a rigid succession since, in any case, we do not start from zero: there are, in fact, many well-established situations as well as many indications of more or less

important possible developments). Therefore, within a continuous dynamic process, we can consider a series of "moments", that deserve to be stressed:

- definition of a sound strategic concept (which should be adjusted, if the Country belongs to a coalition, to the national and plurinational requirements);
- elaboration of the specifications for the systems to be developed (without losing sight of the changes and improvements that must be introduced in the systems already in service, under test or in course of development, especially when economic reasons "press" for an extension of their operational life);

Right.

A Battle Group of the US Navy on the Pacific. Battle Groups are among the main intervention instruments of the US strategy.

Below.

The mighty German PzH 2000 "Taurus" self-propelled gun can be transported by air only by the American C-5 and C-17 and by the Russo-Ukrainian An-124.





- "structural" evolution of the forces intended to be users of systems which are being defined, projected, developed, tested, or in service in an updating/improvement phase;
- organization of production (based, as much as possible, on the coordination of the processes relevant to the various systems which - this should not be forgotten - are meant to operate within the same framework);
- distribution of the systems, and training of personnel for their employment, in order to achieve

their full operational capability (and here - by the way - also come into play the procedures and times for the recruitment of personnel).

The examination of these "moments" - which can be found, first of all, through the analysis of the defence budgets, and also through the study of the parliamentary acts connected with their approval - can give many useful indications on military policies, their implementation times and their projections into the future.

There is a very close connection between available technology (and its prospects of development through innovations), organization and definition/implementation of a strategic concept (based, on the one hand on war experience and, on the other, on the determination of possible and/or probable "scenarios" suited to the resources - natural, economic-financial, scientific-technologic, productive, etc. - actually available or acquirable). The parameters of power must be defined precisely on the basis of this connection.

Exercising "Ariete" tanks during a halt. To operate effectively, combat vehicles of this class need an adequate logistic support.

It is clear that, in this action of definition, the analysis cannot rest solely on quantitative data. It makes little or no sense to say that Nation X is more powerful than Nation Y because it possesses twice the amount of equipment of a given category, or even of all categories. The important elements are: the training level, the performance of arms and equipment and, most of all, the realism of the strategic, tactical, organizational and logistic criteria guiding their employment.

The quantity-quality balance is, therefore, one of the calculable factors, and thus a parameter of today's military power (considering this balance as the result not only of training and quality, but also of everything produced by these two elements, beginning with the average efficiency of the equipment, connected, in its turn, with the availability of spare parts and the organization of the maintenance and management of the materials). On the other hand, this balance can bring about very different approaches.

In the present historical phase - and presumably also in those foreseeable for the 21st Century - military power can be evaluated according to two basic sets of parameters: one concerning the "deterrence" capability and one concerning the capability of "force projection". In practice, these are two sides of the same coin: the capability of projecting force at a more or less wide range can have, in many cases, remarkable deterrent effects. But, let's proceed in an orderly way!

Deterrence can take many forms. In the first place, it is based on the capability of response to a sudden devastating attack. In other words, it is based on the threat of an immediate and deadly retaliation,

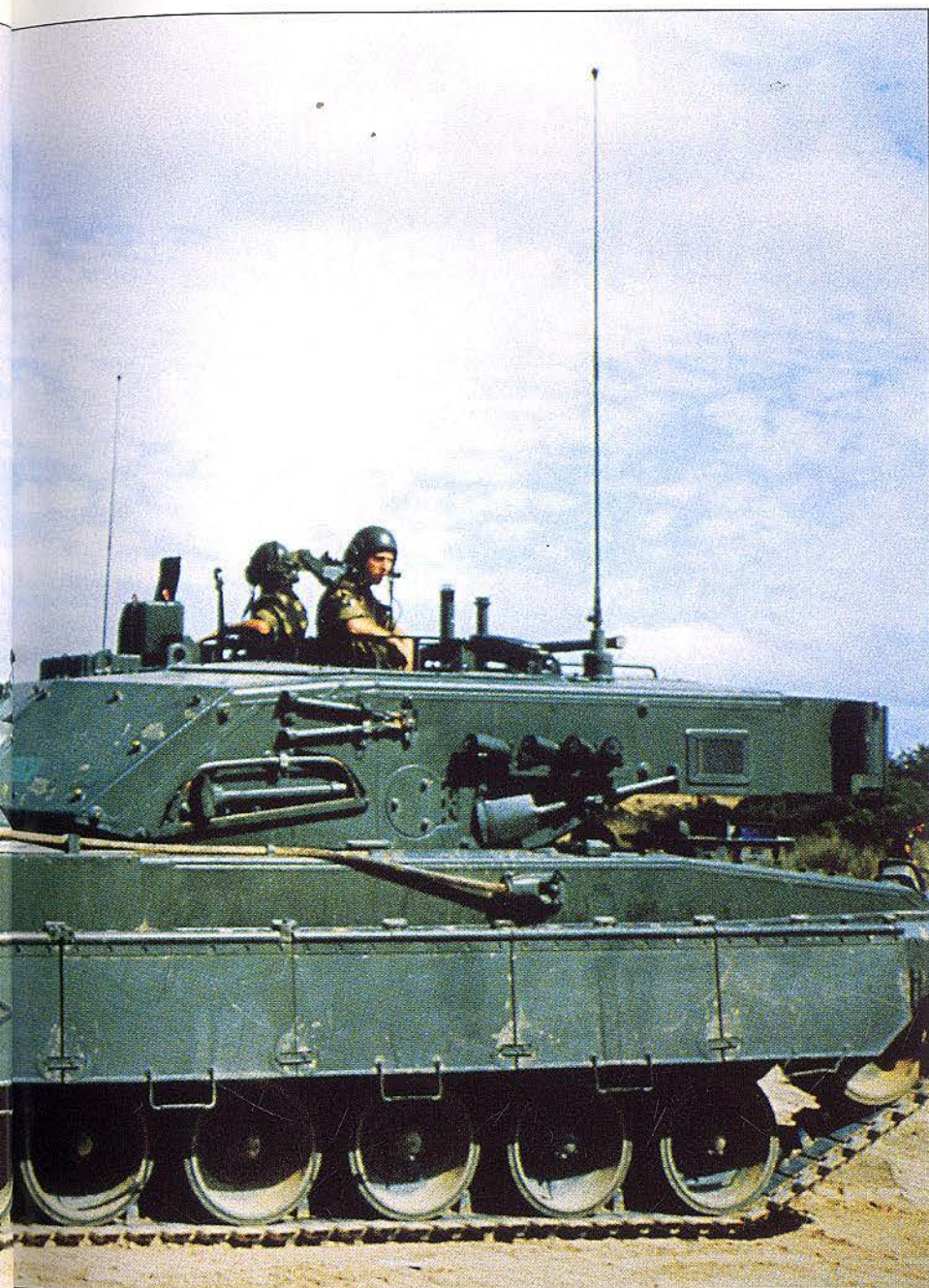


presumably carried out with weapons of mass destruction (nuclear, bacteriological and chemical). On the other hand, it can also lead to a balance of opposing capabilities (in the past, the nuclear equilibrium between the U.S. and the U.S.S.R. was known as "balance of terror" and also "balance of impotence"; as regards this, it must be noted that this kind of balance is not necessarily based on parity, since no one likes being hit by a single bomb, even if, in response, he can

hit the enemy with hundreds of them).

On the other hand, deterrence in its most recent and advanced forms, can be based either on a combination of nuclear and conventional weapons, or on a mix of offensive systems (ballistic missiles, bombers, attack aircraft, etc.) and defensive ones (antimissile missiles, anti-aircraft systems, etc.), and also - as we said - on the capability of projecting power at a more or less wide range.

This second capability, whose



goal could be deterrence or active (even warlike) intervention, can be considered the main parameter of today's military power. And now we ought to specify that this capability is based on a series of connected political and technical factors: the political factors concern both the will to use force (let's not forget that any decision on the use of force belongs - and so it must - to the political leadership; it should be added that the clear intention of using force can be, in many cases, a factor of

deterrence) and the possible acquisition of allies and friends (possibly based also on the concordance of economic interests. The technical factors regard the availability of air, land and naval forces endowed with a real strategic mobility, at a more or less wide range, as well as the disposability of air and naval bases on the territory and/or along the coasts of allied Countries (possibly members of the same coalition) or friendly Nations.

In other words, this means that

today a massive military apparatus, very well equipped but lacking strategic mobility, could be less "powerful" than a smaller instrument capable, thanks to its strategic mobility, of projecting its power to a more or less long distance, at continental, intercontinental and even planetary range.

It must be added that this type of "power", in order to be really effective, both in an active and in a deterrent function, must be based on the most advanced technologies available. And, if possible, must have the possibility of counting, directly or indirectly, on a nuclear umbrella or, in any case, on an umbrella consisting of weapons of mass destruction and relevant delivery vehicles, that could also belong to one or more allied Countries.

From the above, it is possible to conclude that the parameters usable to "evaluate" - rather than "measure" - the military power of a Country or of a coalition, are all more or less connected, or connectable, to the two capabilities mentioned above: "deterrence" and "force projection". By separating the components of these two capabilities - structure and range of the "deterrent" forces (for the Countries which possess them), composition and size of the forces projectable by the Nation and/or the coalition, degree of mobility of the forces in relation to the logistic support, both strategic and tactical - it is possible to acquire useful evaluation elements that can be put together in a global picture.

But we should never forget, obviously, that military power is only one of the factors producing the overall power of a Nation or of a coalition.

□

** Contributor to Italian and foreign military magazines, author of essays on international policy, economy and contemporary history*

ADAPTATION OF THE TREATY ON CONVENTIONAL ARMED FORCES IN EUROPE (CFE)



The CFE Treaty, which has been in force since the times of bipolarity, is a key pillar of European security and the sole instrument for implementing a conventional-armaments control regime. In fact, it establishes strict limitations, reductions and inspections of offensive air and ground assets. The CFE's guidelines are herewith explained, mainly in the light of the agreements recently reached at the Istanbul summit.



The Agreement on the Adaptation of the Treaty on Conventional Armed Forces in Europe (CFE) was signed during the OSCE summit in Istanbul on November 18, 1999. It was the final outcome of three years of negotiations, aimed at adapting the provisions of the Treaty to the present European geopolitical environment, mainly centered on Nato enlargement.

The CFE Treaty, signed in Paris in November 1990 and entered into force in July 1992, was conceived to defuse tensions

between the two cold war superpowers. It established downsized and balanced armaments ceilings for the respective Europe-based armed forces, to reduce the possibilities of waging surprise attacks or wide range offensive operations. Thus a first control regime of conventional armaments in Europe was set up, providing for legally binding regulations on the limitations, reductions and inspections of major air and ground offensive equipment (tanks, armoured combat vehicles, artillery, combat aircraft and attack helicopters), called TLE (Treaty Limited Equipment). This Treaty is considered as one of the pillars underpinning European security for several reasons.

In fact, an unprecedented reduction of conventional armaments in Europe has been imposed on nations (more than 58,000 TLE have been scrapped in compliance with the prescriptions of the Treaty). Inspections have also been carried out to verify compliance with the limits set for air and ground forces (about 2,700); thus member nations' military apparatuses have gained transparency and mutual confidence has been enhanced.

The CFE process has also provided a legal instrument which has compelled the Soviet Union to get rid of a great number of weapon systems and equipment, now put under the control of former Soviet Republics. This way, they have peacefully and gradually been detached from the Russian sphere of influence. It is also to be pointed out that all the provisions of the Treaty have been implemented, even when great political changes took place, such as the collapse of the Soviet Union, the partition of Czechoslovakia into two separate nations, the German reunification and the breaking out of armed conflicts and/or disorders in the territory of at least four signatory countries (Georgia, Armenia, Azerbaijan,

Tadzhikistan). More recently, the Treaty has also been applied during the Nato intervention in Kosovo by the Russian Federation, which carried out inspections to the Atlantic Alliance's sites based in Italy (Aviano) and Hungary (Tazar). On such important occasions, transparency was a key factor for the success of the inspections, which proved to be very effective in defusing tensions between states parties in a crisis situation.

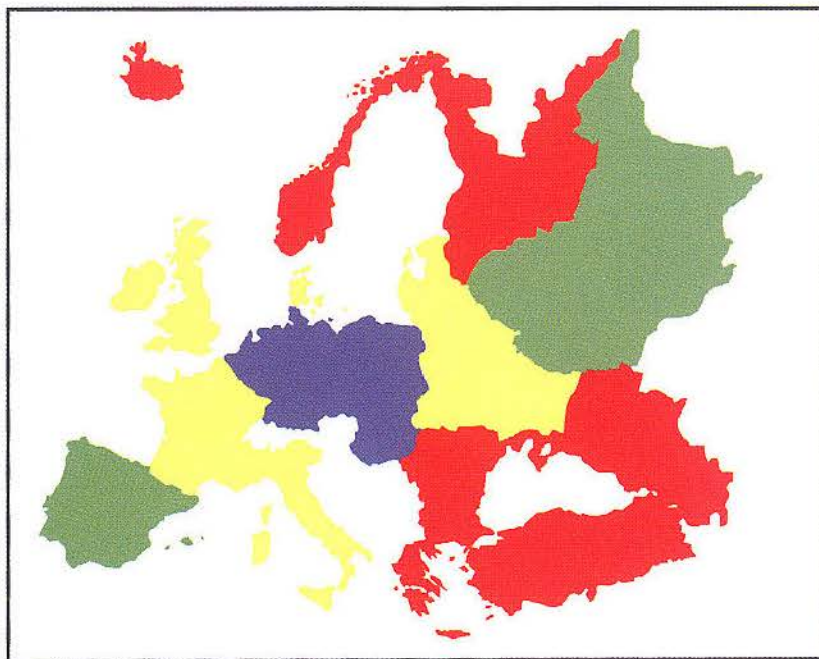
The decisions taken in Istanbul, comprising both the text of the agreement and the Final Act of the Conference of States parties, restated the politico-military relevance of the document and widened its scope as well. In fact, now more than in the past, the adaptation process reflects the different security requirements that each nations tried to safeguard during the negotiations.

To comply with the obligations undertaken under the Paris agreements, a great number of Army units/organizations, up to regiment/batallion level, had to perform demanding operational tasks. In fact the Army, more than the Navy or the Air Force, is bound to comply with all the regulations and protocols agreed upon at international level. These responsibilities will increase in the near future, given the states parties' expectations as regards the effectiveness of this security policy instrument, to be applied both at national and international level.

DEVELOPMENT OF THE TREATY

The basic idea of balancing the conventional forces belonging to the two blocs was put into practice by mainly limiting the deployment of the respective TLE within the so-called "Treaty implementation area", lying between the Atlantic Ocean and the Ural Mountains. A

REGIONAL CEILINGS OF CONVENTIONAL ARMAMENTS AS STATED BY THE ORIGINAL CFE TREATY



	REGIONS				LIMITS FOR GROUPS OF STATES PARTIES			LIMITS FOR ITALY
	CENTRAL AREA	ENLARGED CENTRAL AREA	EUROPE FLANKS EXCLUDED	FLANKS	IN ACTIVE UNITS	STORED QUOTAS	TOTAL AMOUNTS	
	4.4	4.3	4.2					
TANKS	7.500	10.300	11.800	4.700	16.500	3.500	20.000	1.348
ARTILLERY	5.000	9.100	11.000	6.000	17.000	3.000	20.000	1.955
ACV	11.250	19.260	21.400	5.900	27.300	2.700	30.000	3.339
ATTACK HELICOPTERS	-	-			2.000	-	2.000	139 (*)
COMBAT AIRCRAFT	-	-			6.800	-	6.800	650

(*) A MAXIMUM CEILING OF 139 UNITS WAS ESTABLISHED FOR THE YEARS 1996-1997. THE CEILING SET IN 1990, UPON THE SIGNATURE OF THE TREATY, WAS 142 UNITS.

ceiling of 20,000 tanks and artillery, 30,000 armoured combat vehicles, 2,000 attack helicopters and 6,800 combat aircraft was established. These quantitative limitations were further analyzed and split up among 5 smaller regions within the whole implementation area.

The mandate of the negotiations was thus fulfilled, which aimed at preventing "critical" mass concentration of conventional forces in highly sensitive regions, especially Eastern-European territories and the so-called "Flank

area", comprising 12 countries, plus a part of the Russian Federation. National ceilings for each of the 22 signatory countries and TLE category were then negotiated between NATO and the Warsaw Pact members.

Following the collapse of the USSR, in 1992 at Taskent, Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Russia and Ukraine shared the number of TLE allotted to the Soviet Union among themselves, as they officially took the place of the USSR within the scope of the Treaty. Thus the

states parties became 29 and then 30, after Czechoslovakia was split in two in January 1993.

The huge drawdown process, as stated by the agreement, started in November 1992 and was completed three years later in November 1995. Within this framework, the greatest effort was made by the Russian Federation, which had to scrap about 12,000 TLE and immediately expressed its difficulties in complying with the limits set in the "Flank area", comprising the Leningrad Military District to the North, and the Northern Caucasus Military District to the South.

This issue found a compromise solution during the first Conference for the review of the Treaty, held in Vienna in 1996, when the states parties acknowledged Russia's increased security requirements in the Caucasian area and allowed it to keep a higher force level in these two duly downsized sectors. New deadlines (December 1999) were also set to reach the new force ceiling. On that same occasion the Russian Federation officially suggested a general overhaul of the Treaty, to adapt it to the changed post cold war politico-military conditions.

The decision of initiating a new series of negotiations was officially taken at the OSCE summit of Lisbon in December of the same year, where the main goals of the overhaul process were agreed upon. The procedures for admitting Poland, Hungary, and the Czech Republic to the Atlantic Alliance were analyzed and determined the outcome of the negotiations. In fact, the basic guidelines at the core of the updated CFE agreement, endorsed by the UN and the Russian Federation in July 1997, reflected the requirement of facing that historic event in a satisfactory way for all the parties concerned.

The declaration that a "common denominator" had been reached on that issue was purposely made to coincide with the presentation of

the new members to the Alliance summit in Madrid. In short, negotiators had the ambitious aim of modifying the bloc structure of the Treaty, defining measures and inspections to prevent mass concentration of forces on the territories of new Nato members and allow other OSCE nations to adhere to the new regulatory regime. Moreover, on that same occasion, most Nato nations agreed to reduce their total TLE holdings by 5% and increase their passive inspection quotas to consolidate the inspection regime.

The results obtained in two years of negotiations were finally endorsed in March 1999, the last milestone leading to the final meeting of the 30 heads of state and government to be held in Istanbul. Those preliminary agreements were specially important, taking into account that Russia had broken all political relations with Nato in that period, due to the air campaign waged by the Alliance against Serbia.

A MOVE AWAY FROM THE BLOC STRUCTURE

The abolition of the bloc structure is the most important amendment, allowing the CFE to be a multilateral treaty signed to safeguard 30 nations, and not two alliances only.

A new concept has been adopted to update the old TLE limitation system, by setting different "National Ceilings" (NC) to replace the previous collective limits. These NCs are to be applied to the same TLE categories and to each state party. Thus, the territory of each CFE nation is a separate "region", for the purpose of the Treaty. National ceilings can be raised within well-defined limits and provided that one or more states parties contemporarily reduce theirs by the same amount in the same categories or sub-categories; they can also be unilaterally lowered, by autonomous decision of each state party, but

THE CFE PROCESS

List of main events:

January 10, 1989: the mandate for the negotiation on Conventional Armed Forces in Europe was signed,

March 9, 1989: negotiations started,

November 20, 1990: the CFE Treaty was signed by 22 States,

September 19, 1991: the Baltic countries became independent. Not belonging to the Baltic Military District any longer, they were no more obliged to comply with the Treaty regulations. After the collapse of the USSR, the Baltic nations were not among the original signatories of the Treaty, nor were they the official heirs to the USSR. They had only to allow CFE inspections to be carried out on their territories as long as they hosted Russian troops,

December 21, 1991: Italy ratified the CFE Treaty,

May 15, 1992: The Taskent document was signed. A new distribution of TLE quotas was made among the eight former Soviet Republics belonging to the ATTU area (Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Moldova, Russia and Ukraine). Thus the signatory countries became 29. When Czechoslovakia was split into the Czech and the Slovak Republics in January 1993, they became 30,

June 5, 1999: Oslo Extraordinary Conference. The 29 signatory nations officially endorsed the changes adopted after the collapse of the USSR (the text of the Treaty was amended of any reference to the previous Nato/Warsaw pact Alliances),

July 10, 1992: the agreements were signed on the provisional implementation of the CFE Treaty and of the Final Act of the negotiation on the numbers of conventional forces in Europe-CFE I/A,

July 17, 1992: the CFE Treaty entered into force,

November 16, 1992: the reduction period started,

November 16, 1995: the reduction period ended,

June 1, 1996: First Review Conference of the CFE Treaty. The Flank area was downsized and Russia was allowed to keep its actual TLE holdings until December 31, 1999, while Ukraine was granted a higher force ceiling. Russia's increased security requirements in the Caucasian area were recognized. A decision was taken to start a Treaty adaptation process,

December 1, 1996: Lisbon OSCE summit. The Treaty adaptation process was formalized, by defining the objectives of the revision work and its basic parameters (Scope and parameters Document),

July 23, 1997: the 30 states parties established the basic guidelines underpinning the updated CFE,

November 19, 1999: Istanbul OSCE summit. Signature of the Adaptation of the CFE Treaty and of the Final Act of the Conference of CFE Nations.

this should not allow another country to arbitrarily rise its national limits.

In this connection it is noteworthy that new limits were established for

all CFE countries, taking into account each nation's actual number of equipment and not the figures reported by the old Treaty, which were certainly higher.



Disposal of an Ukrainian armoured vehicle in a reduction site.

On the same occasion the Russian Federation confirmed that the armament level in its possession was adequate to meet its internal security requirements.

Italy has decided to make the following cuts to its national equipment ceilings:

- tanks: from 1,348 to 1,267
- armoured combat vehicles: from 3,339 to 3,172
- artillery pieces: from 1,955 to 1,818
- combat aircraft: from 650 to 618.

The United States, Great Britain and Germany have carried out major reductions as well, followed by Canada and Denmark, though on a reduced scale. This way, the Alliance has been able to enlarge without increasing the aggregate

number of its TLE (as would have been the case with the admission of new members). The fundamental concept endorsed by all states parties, prescribing that Europe's general force level should be kept unchanged has thus been complied with.

Lastly the system of setting quantitative limitations to each state party also envisages "national sub-ceilings for active units" (i.e. items not stored in depots as permanent stocks). In essence, as regards the Republic of Belarus, the Czech Republic, the Polish Republic, the Russian Federation, the Slovak Republic, Ukraine and Hungary, further limits have been established to the deployment of TLE - though complying with their respective NCs - for three categories of ground equipment only: tanks, armoured combat vehicles and artillery pieces. They should be

kept in active units and included in "sub-ceilings" which can be increased, within the limits set for national ceilings, provided that:

- any sub-ceiling be increased by contemporarily scaling down the respective national ceiling in the same TLE category,
- each increase in a TLE item be offset by reducing the respective national ceiling by four units,
- the sub-ceiling set for active units be lower than the new national ceiling, after being downscaled.

MEASURES TO COUNTER DESTABILIZING MASS CONCENTRATION OF FORCES IN THE TREATY IMPLEMENTATION AREA

The establishment of "territorial ceilings" (TC) is a major innovation.

They indicate the maximum levels of TLE (for three categories of ground equipment only: tanks, armoured combat vehicles and artillery pieces), which can be deployed in the territory of each state party, including also possible forces belonging to other countries stationed in the same area. Territorial ceilings have therefore been defined by adding to national ceilings the TLE quotas which a country may deploy besides its own equipment. TCs may be raised or lowered, following the same principles governing national ceilings. Not all CFE countries, however, have been allowed to accept the same quantity of equipment from other states parties; in fact, nations comprised within the "Flank area" have the same level of territorial and national ceilings. Moreover, the Odessa region, in Ukraine, and some regions belonging to the Russian Federation (within the Leningrad and the Northern Caucasus Military Districts) have been applied further restrictions within duly defined territorial "sub-ceilings".

Lastly a commitment has also been made by the Czech Republic, Slovakia, Poland and Hungary (signed in the Final Act of the Conference of States parties and not included in the text of the Treaty), not to establish a same level of national and territorial ceilings by 2002, thus further limiting their "reception" capabilities.

However, the possibility for some countries to host foreign TLE is not to be ruled out, as flexible measures have been adopted allowing for temporarily exceeding territorial ceilings. In fact, since the inception of the enlargement process, Nato members have often reiterated that the permanent stationing of forces on the territory of new members



should not be allowed, mainly to reassure Russia on the military consequences of the enlargement. The newly designated members, on the contrary, expressed their perplexities on the subject, as Nato could not deploy its forces in those nations without violating the Treaty.

The envisaged compromise allows for temporarily exceeding established limitations, in the case of UN/OSCE mandated peace support operations, military exercises and unit deployments. In sum, all CFE nations will be allowed to host a basic load of TLE, i.e. 153 tanks, 241 armoured combat vehicles and 140 artillery pieces exceeding national ceiling. As regards states parties outside the "Flank area", these figures are respectively raised to 459, 723 and 420, for the same categories of equipment. These limits do not apply to units engaged in PSOs, which can be deployed with no quantitative restrictions.

In a few words, countries like Italy, Germany or France have different national and territorial ceilings and may host a number of TLE equal to the difference between these two limits (in general totally or partially reserved

for permanently stationed troops), to which the higher temporary TLE quota can be added.

On the contrary, states parties lying within the "Flank area", such as Greece, Bulgaria or Georgia, whose national and territorial ceilings coincide, can only host the lower temporary TLE quota. The new Nato members and the Slovak Republic, after leveling their two national and territorial ceilings, will be allowed to host the higher temporary TLE quota. Within this framework, the only exception is the Republic of Moldova, which has completely given up such possibility.

Once the measures to limit force deployments and establish the related "thresholds" have been defined, a complex system of inspections has been set up, requiring a thorough review of the protocols governing "Notification and information exchange" and "Inspections" procedures. Passive inspection quotas assigned to each state party have also been increased.

Each CFE nation shall therefore give more detailed supplementary information on the movements of its TLE than in the past; in fact, following a pre-established

schedule or on the occasion of particular events, it will have to report any transfer or deployment of equipment outside its national territory, transit on the territory of other countries and employment in various kinds of operations. If territorial ceilings, even temporary, are exceeded, the areas of deployment of exceeding TLE may be subject to inspections and the circumstances which caused the notified surplus will have to be accounted for. Besides these measures, a new commitment has been made by several Eastern-European countries, together with Belarus, Germany, Ukraine and Russia (some regions only), not to employ the adapted treaty mechanisms to increase their territorial ceilings, and by the provisions of the accords signed by Georgia, the Republic of Moldova and the Russian Federation to reduce the latter's TLE ceilings on the territories of these two nations.

ACCESSION CLAUSE FOR OTHER OSCE NATIONS

This initiative can have significant repercussions for the nations in the Baltic and Balkan areas.

The exclusion of Lithuania, Estonia and Latvia from the CFE Treaty was based on national sovereignty principles. After the collapse of the USSR, these countries refused to be included among the nations which officially replaced the Soviet Union, nor were they among the signatories of the accords and therefore did not take part in the Taskent Conference. Their endorsement of the new treaty as full members would strengthen their political independence and provide an indisputable security framework at international level.

As for the Balkans, an important connection has been established with the Dayton accords. The latter were initiated in Vienna under the aegis of OSCE and the active support of six "guarantors" (the



USA, Russia, France, Germany, the United Kingdom and Italy), and provided for setting up three negotiating tables: the first produced an agreement, signed in 1996, on confidence building measures (similar to the CSBM (3) envisaged by the Vienna Document in its several versions).

The second table, focusing on armament control, comprised the five parties to the negotiations (Croatia, the Federal Republic of Yugoslavia, Bosnia Herzegovina, the Federation of Bosnia Herzegovina and the Srpska Republic) and ended with an agreement, signed in Florence in June 1996, which was similar to the CFE but adapted to the specific post-Yugoslav conflict situation. (Sub-regional agreement on

armaments control in the former Yugoslavia).

Lastly the third negotiating table on regional armaments control, which is still in progress, covering all former Yugoslavia nations and their neighboring countries (Macedonia, Austria and Slovenia, and also other signatories of the CFE Treaty, such as Bulgaria, Romania and Hungary) is aimed at extending the same regulations set by sub-regional agreements to a wider territorial area. The accession clause of the Treaty allows the signatories of the Dayton accords to conclude agreements on this subject without carrying out separate negotiations. It also sets the preconditions for the implementation of an ambitious



Wrap-up of an Italian-led inspection activity carried out in Ukraine.

military superiority is no longer the only means to guarantee national security; on the contrary a widespread willingness to reduce national military assets, even partially, is seen as being instrumental in reaching the same objectives. Armaments control too has ushered in a new military security concept, based on cooperation among nations. Within this framework, it is not so important to ascertain whether an armaments control plan can effectively disarm a nation, as to know whether it can lower the possibilities of a general war and the lethality of a future conflict, guaranteeing a credible military posture at the same time. If that plan cannot fulfill this aim or leaves things mainly unchanged, then it is ill-suited to protect national interests. The outcome of armaments control negotiations is therefore linked to the possibility of balancing participating countries' different politico-military requirements, risk assessment perceptions and international scenario evaluations, in order to safeguard their respective security interests.

The review process of the CFE Treaty was concluded with the adoption of a new and more complex document, satisfying most of the following conditions: the original mandate of establishing and keeping a reduced and balanced level of conventional forces in Europe was fulfilled; the Atlantic Alliance kept the right of deploying its forces on the territories of member countries; the Russian Federation obtained a very strict system of mutually-binding guarantees, as regards Nato enlargement. The Treaty can now become the bedrock upon which a pan-European security architecture can be built, being open to all OSCE countries willing to join.

From a more practical point of

view, the expenses necessary to implement these new measures, which mainly include the acquisition of tanks, armoured combat vehicles and artillery pieces, will be shouldered by the states parties' ground forces. In this context, the Army too will be assigned additional tasks, i.e. mainly monitoring and notifying the presence of TLE on the national territory, the movements of Italian TLE engaged in training and combat operations outside national boundaries (even when in transit from one country to another), and the deployment of foreign TLE on the national territory (TLE in transit as well).

In essence, future Army operations shall be increasingly translated into the CFE "language", in those sector of major visibility requiring coordinated actions among states parties.

In the light of the above, the outcome of the Istanbul summit is another very important milestone in the life of this treaty.

It is the most ambitious and successful effort in history to limit conventional weapons in Europe and is still one of the fundamental tools for establishing an international security policy, thanks to its present effectiveness and future development possibilities.

□

** Lieutenant Colonel,
Chief, Armaments Control Office,
Army General Staff*

armaments control plan, known as "harmonization process", extending the same commitments and limitations endorsed by the 30 CFE countries to the 54 OSCE nations. This initiative, dating back to the middle '90s, has not been fully developed yet, as to date the focus has mainly been on the issues of integrating the different information exchange systems, established by the CSBM (based on the Vienna Document) and the CFE; but new options are envisaged by the adapted treaty.

SOME OBSERVATIONS

A new concept has recently gained ground, according to which

NOTES

(1) The countries belonging to the so-called "Flank area" are: Iceland, Norway, Turkey, Greece, Bulgaria, Romania, the Republic of Moldova, Azerbaijan, Armenia and Georgia.

(2) A detailed study on the "Flank" concept was published in 1995 by "Rivista Militare" no. 6 (It.Ed.).

(3) CSBM: Confidence and Security Building measures.

THE ATLANTIC ALLIANCE

The changed international scenario requires a radical revision of the strategy of the Atlantic Alliance, whose future rests on two basic archetypes: interoperability of the forces, which can avert the risk of a dishomogenous technological development; cooperation at continental level, with the prospect of creating a European military instrument, endowed with a genuine vocation for interatlantic cooperation.

by Giuseppe Santangelo

A look at the future



The adaptations of the armed forces to the demands of the new century concern mobility, flexibility and professionalism.

The change in the military instrument responds, first of all, to a transformation of the international context. After the cold war, a partnership in an Alliance is not sufficient, it is necessary to be able to project one's own force and stability, also on the military plane.

In fact, as a consequence of the technological development of informatics, telecommunications and mass media, the security of a community does not depend only on what is adjacent, but also on what occurs at a distance.

In the unstable and unpredictable post cold-war world, the need still exists for a transatlantic forum, for consultation and cooperation on subjects concerning security.

Furthermore, it is necessary to help Russia and Ukraine in their transition to post-communism, and not leave them to their fate. We must support the countries of Central and Eastern Europe, and let them become part of a concrete structure of confidence and cooperation.

At the beginning of the 21st Century, NATO is the real cornerstone of Euro-Atlantic security. Three new members have joined the Alliance, and actions are under way for further adhesions.

NATO welcomes first of all those Countries which, in Central Europe, were victims of geography rather than of history, and which have paid a very high price for being, for centuries, the battleground of the great powers. The great fires of the 20th Century started in Central Europe and in the Balkans.

The enlargement of NATO and that of the European Union include those Countries in a system of collective security, in which they can participate in a sovereign and equal manner. They are no more the recipients of an inconstant and condescending protection, but rather the co-authors of their own security.



Therefore, the Atlantic Alliance reviews its strategies and instruments, and it must do that, because today's threats are, in part, different from yesterday's. Otherwise, NATO would be inadequate to face them.

In the cooperation with Russia and Ukraine, solid foundations have been built. Partnership for Peace and the Council of the Euro-Atlantic Partnership have realized a structure within which every European Country can work with

the others to meet the security challenges.

NATO is carrying out two important missions in the Balkans, in order to help constructing a stable and lasting peace in a land of great geo-strategical importance. The Alliance is still the main forum where Europe and North America pursue their common interests and safeguard our common values.

From this point of view, there are two particular sectors where we



Left.
"Bison" 8 x 8 armoured car
of the Canadian contingent in Bosnia.

Facing page.
Italian paratroopers in East Timor.

certain that our forces keep their interoperability.

Within the Alliance there are growing imbalances between the Countries which invest faster in new technologies and capabilities and those which, on the contrary, proceed at a slower pace. All this inevitably impairs interoperability in a more or less serious way, depending on the degree of technological development achieved by some allies in the sectors of command, control, communications and intelligence, which undoubtedly are the essence of every operation, be it combined or joint. Therefore we must make sure that technology is a strengthening element for the Alliance, rather than let technology turn us into slaves of our own decisions.

To have efficient forces in the modern security context means also that they should be structured and equipped for modern operations. Today it is necessary to have fast-moving forces, capable of adapting quickly to the changing situations, hard-hitting and fit to remain in the theatre for the time needed to perform their task. This means that NATO's military forces must be mobile, flexible, efficient and enduring.

The "NATO forces" must be "all allies' forces": one should avoid any kind of division between the Countries furnished with high technology, which provide logistics, smart bombs and intelligence, and those, with less technological capabilities, which are supposed to provide only soldiers.

Today, this would be untenable from the political point of view.

Similarly, we should avoid another type of task division, such as that of the European allies managing smaller crises, while the

must work intensely, in order to prepare NATO for the future, as was clearly noted last April at the Washington Summit.

THE DEFENCE CAPABILITIES INITIATIVE

First, we must proceed with the Defence Capabilities initiative (DCI): we must be sure that all the allies continue to devote resources and investments to the military and connected technologies.

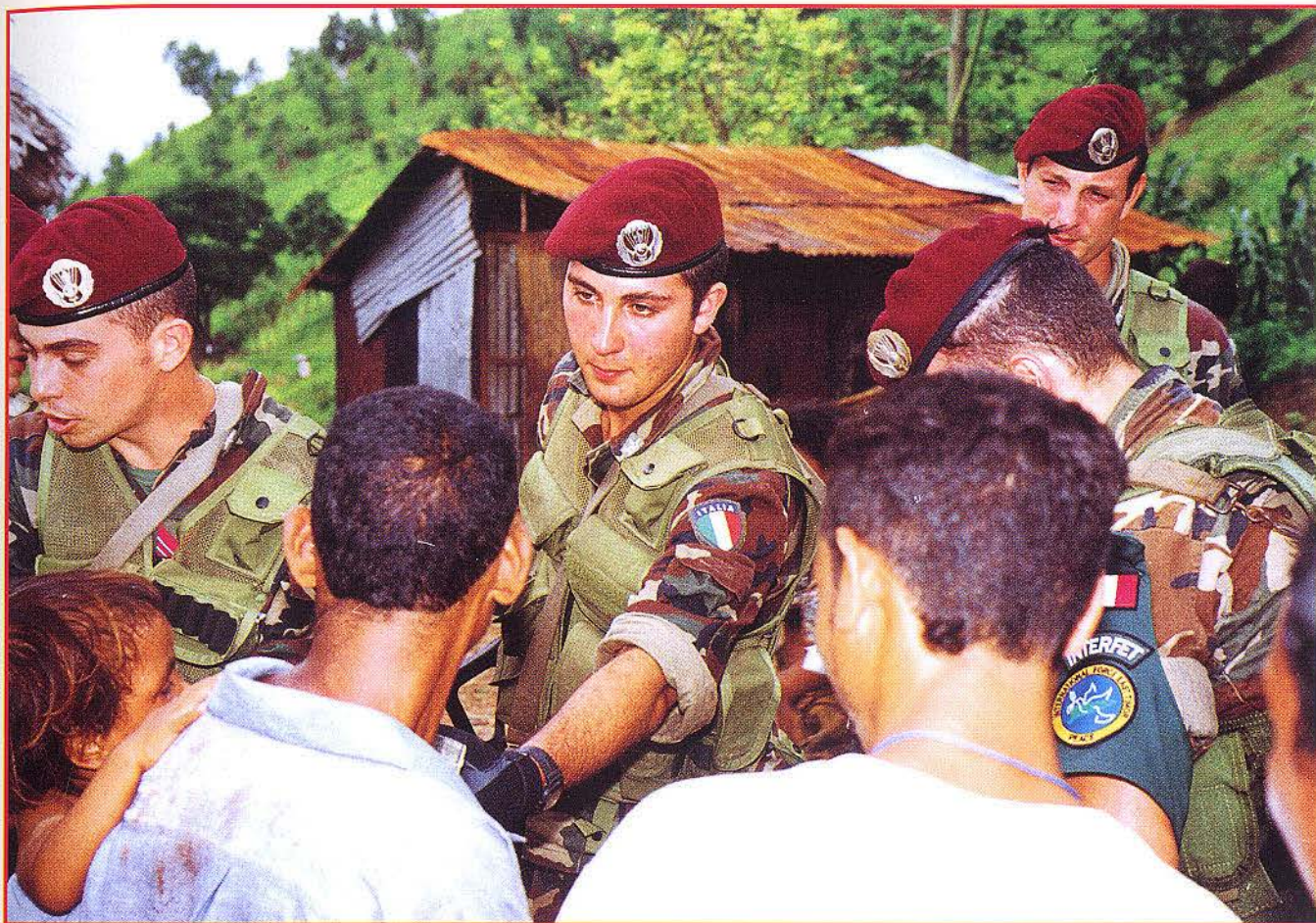
Second, it is necessary to support

and guide the development of the European Security and Defence Identity (ESDI).

This is clear to everybody, and Kosovo was just an additional occasion to remember these facts.

The military capability is, at the same time, the heart and soul of the Alliance: in order to carry out all NATO missions -- crisis management, peacekeeping, Partnership, cooperation and collective defence -- the forces should be efficient and able to operate together.

This means that we must be



United States engages in the management of missions of collective defence.

For the sake of the Alliance's cohesion and strength, it is indispensable that in the long term, burdens, costs and risks be divided among all, and in a proportionally equal manner.

Purpose of the Defence Capabilities Initiative is precisely that of examining these challenges, ensuring a better balanced Alliance. In this regard, 58 specific areas of NATO's military capabilities, in need of improvement, have been singled out.

The members of the Alliance, in particular, must pay more attention to some fundamental sectors, such as:

- mobility, which permits our instrument to deploy rapidly;
- sustainability, aimed at assuring the necessary logistic support to the forces - the right material at the right moment - according to

the environment in which they operate.

- better command-and-control capability;
- survivability, which means protection of our own forces from new threats, such as weapons for mass destruction;
- efficient engagement, i.e. providing the accuracy and flexibility needed to engage the forces in a range of missions, adapting them to the changing circumstances.

In order to improve these capabilities, NATO must include these objectives in its process of defence planning, allocating its resources in a more profitable way than in the past.

All this is not an argument only to find new resources: today the European allies spend as a whole about 60% of what the U.S. alone spends for Defence, but nobody thinks that the European allies have 60% of the U.S. military capability.

The dispersion of resources - which at times repeats itself - in a larger number of countries, industries and projects, is the reason for the great reduction of their effectiveness.

We must cooperate, not only on the supply side, but on the demand side as well.

Europe must be provided with a greater capability in terms of command, control, intelligence and force projection.

It is absolutely necessary to improve this return to investments through new managerial techniques, definition of priorities and courageous decisions.

THE EUROPEAN SECURITY AND DEFENCE IDENTITY

The DCI will support the other great transformation which is taking place within the Alliance: the development of the European



Security and Defence Identity.

The basic principles of this new era of cooperation in European security - fully shared by the U.S. - were clearly and sincerely expressed by the Secretary General of Nato, Lord Robertson.

He mentioned three "Is" with reference to ESDI:

- indivisibility of the transatlantic security;
- improvement of the European capabilities;
- inclusiveness of all European allies.

The campaign of Kosovo has shown that the European allies were dependent on the American military capabilities, from smart weapons and "all-weather" aircraft, down to the land forces, capable of deploying rapidly and remain in the theatre with an adequate logistic support.

On paper Europe has 2 million men and women, in military service, which is more than the United States has, but despite these 2 million soldiers, it was very hard to "produce" 40,000 men for the deployment in the Balkans.

Obviously there is something wrong, and Europe knows it!

Europe, unlike the U.S., was never a military power, even if, now, with a common currency, it acquires a visible attribute of economic power in its traditional form. But the European Union, since its birth, has never hidden also other ambitions.

Now it must equip itself also with an instrument of power, complementary and not alternative to the Atlantic Alliance, in which Europe already participates.

There is no intention of building a new NATO: the idea is to put together the European resources in

order to act, when necessary, either alone or through the common instruments of the Alliance.

A stronger Europe will be able to respond to a larger number of emergencies, without being exceedingly dependent on the U.S. Should the North American allies, in the future, decide not to spend human and material resources for purely European challenges, then the European allies will be capable of managing these situations by themselves.

But when all allies operate together, they are certainly stronger; if Europe does more in this sector, it does not mean that the U.S. does less. It simply means that in the future we shall have a stronger and more flexible NATO.

During 1999, the members of the EU have made significant steps forward to make the ESDI take off.

First of all, the appointment of

Facing page.

Italian soldier on surveillance duty in Bosnia.

Right.

French troops in a shooting exercise with Italian-made individual weapons.

Javier Solana -former Secretary General of NATO - to the office of EU Representative for Foreign and Security Policy and, later, Secretary General of WEU.

The EU is developing a process aimed at creating an inner "policy and security Council", capable of issuing political directives on security matters, with the support of a military Staff.

But the most important and significant step was taken at the recent summit of Helsinki, where the EU made a challenge to itself: to set up, within the next three years, a well trained rapid-reaction force of 60,000 men, available within 60 days from the order, able to be sustained in the theatre for the maximum period of one year.

It is an ambitious objective: suffice it to think that one should envisage to prepare another 60,000 men, for the six-month rotations.

But experience shows that when the EU aims at ambitious objectives, it very seldom fails!

Just consider the introduction of the Euro as common currency: the objective decided at Maastricht by the EU in 1992 had raised perplexities among many experts.

Today that objective has been reached and, if the EU has been able to achieve that result, it will succeed in the military sector as well.

This will be a goal of absolute importance also for NATO.

In view of this, the Alliance has taken practical measures in order to give concrete support to the European-led operations: for instance, the new command structure already permits to develop European-guided operations employing NATO equipment and capabilities. Furthermore, also the



planning process of the NATO forces takes into consideration the European requirements and, as we said, the Defence Capability Initiative is improving the military capabilities as a whole.

The ESDI must be managed with great care, if we want to attain its final goal. In this respect, there are some obstacles along the way, and they must be confronted with due caution.

In the first place it is very

important to tackle the questions concerning the participation of non-EU European allies in European-led operations: it is not only a matter of appearance!

The support of Turkey, Norway or Poland to an operation conducted by the EU is fundamental, both from the political and the military point of view. This is even more true if the European Union wants to employ NATO equipment and capabilities



Canadian soldier on the firing line.

in order to carry out the operation.

Therefore it must be certain that between NATO and the EU there are the highest possible cooperation and transparency.

The reason is simple: each of our member Countries has only one defence budget and one typology of forces.

We must all be certain that the defence planning in both organizations is completely adherent, so that our forces can engage both in EU and NATO operations, and not only in one of the two!

These are real concerns, but we should look ahead with optimism, because the present debate is based on concrete and realistic considerations.

And it is precisely this realism that reminds us that the European strategic independence is not yet achievable at present. The United States still keeps fundamental strategic capabilities, indispensable for the different, great or small, emergencies: logistics, strategic transport capabilities, satellite information etc. The ESDI does not want Europe to proceed "alone"; it wants Europe "to do more".

There is no reason to fear a decoupling, since no one wants to deal with a decoupled Europe!

Even the most ardent supporter of Europeanism understands that an ESDI intended to undermine transatlantic relations would be a loser from the beginning. Bosnia and Kosovo have made definitively clear that NATO remains the preeminent institution for the security of Europe.

For Europe, to undermine this institution - either deliberately or

by chance - would be a real disaster.

The transatlantic relationship is - and will be in the future - extremely strong. North America and Europe continue to be united by a very solid bond, deriving from common values and interests and from decades of mutual trust and security.

Therefore, let us trustfully continue in the realization of ESDI, in an atmosphere of openness and mutual collaboration: only on these bases the ESDI will proceed in the best possible way.

CONCLUSIONS

It would be impossible to understand the future if we don't say something also on the new challenges; if we are not aware all the time of the multiplicity and new nature of the attacks on the



U.S. soldier equipped with a simulation laser-system.

still unstable order prevailing after the cold war; if we are not ready to conform to the new world, to concur in the establishment of police forces tasked with enforcing the rules, rather than protecting a sovereignty.

The coexistence of wealth and underdevelopment is a source of insecurity and potential conflicts. Driven by need and lack of freedom, peoples tend to migrate. Men go where there is wealth and run away from rancours and vindications that we believed were buried forever.

The vulnerability of our society to all external perturbations will make the distinction between public and private violence more and more difficult.

The conflicts of the future will increasingly assume the character of wars without fronts and borders, and this will lead to humanitarian interventions, peace operations and military actions, sometimes even on a large scale, in order to contain the aggressive interventions of adventurous heads of State.

Vis-à-vis these prospects, the old rule of abstention does not hold anymore.

Those who attend only to their internal problems, even if they belong to the leading part of the world, give a hand to instability, with all the possible consequences.

This is the root of one the most radical changes occurring in our Country. A new idea of responsibility, investing foreign policy and the military instrument that must support it to make it credible. Responsibility not only in the system of our Alliances, but also to act in

occasional coalitions, and to become - as in operation ALBA - their promoters and protagonists.

The present crises have put to the test our maturity, also on the military plane.

We have shown not only readiness of reaction and capability of mobilization, but also an extraordinary flexibility on the ground, frequently moving in social contexts that often had no pre-established rules and were fundamentally anarchic.

In other words, our military proved to have not only the necessary flexibility to govern, also militarily, the conflicts of the present day, but also the capability of rebuilding a State and a civil society.

□

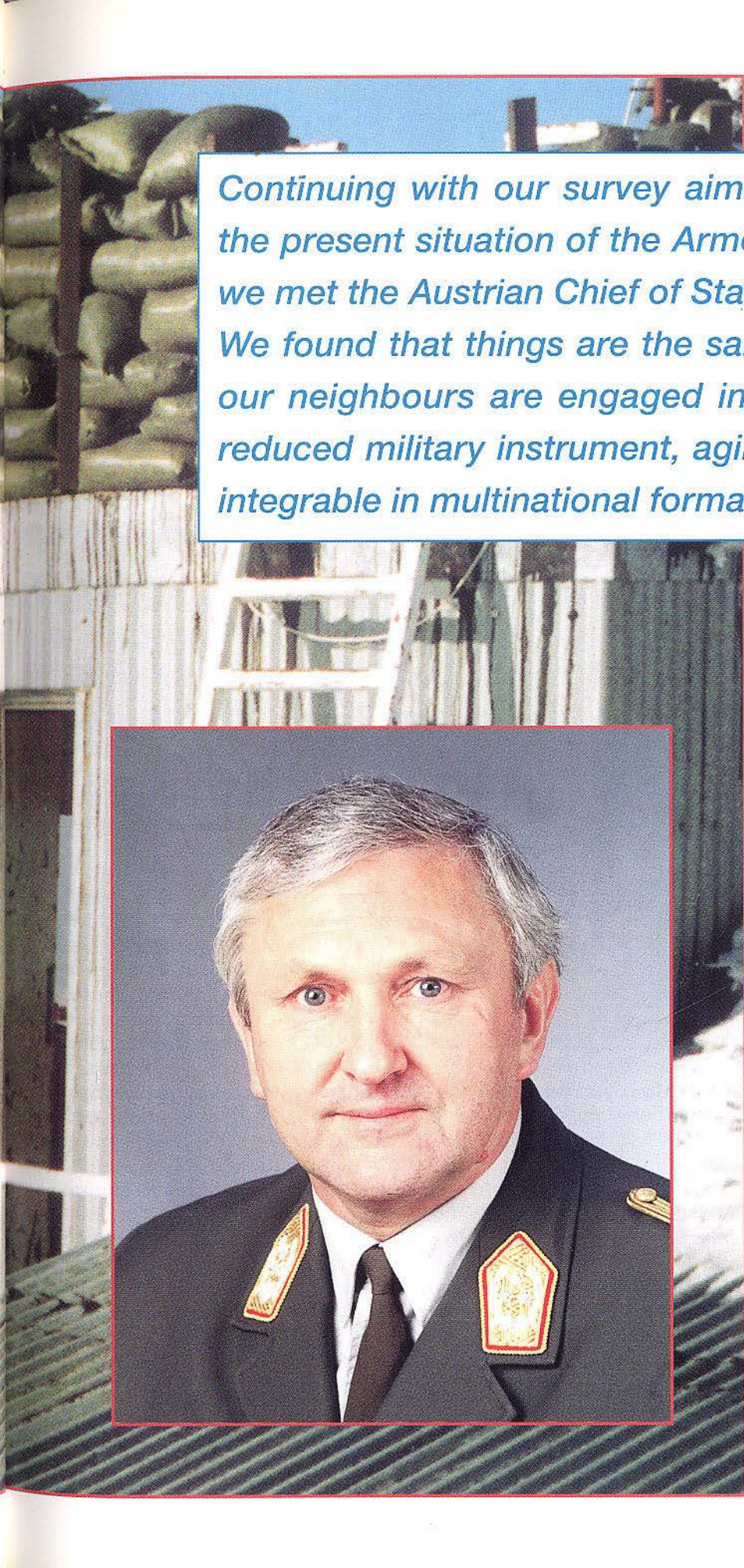
** Brigadier General,
Member of the Italian Delegation
to the Atlantic Council (RICA).*

AUSTRIA

THE NEW ARMED FORCES

by Enrico Magnani *

Interview with General Horst Pleiner,
Chief of the General Staff

The background of the page features a photograph of a military fortification. In the upper left, there are stacks of green sandbags. A white ladder is leaning against a structure in the center. The overall scene suggests a military or defense context.

Continuing with our survey aimed at understanding the present situation of the Armed Forces in Europe, we met the Austrian Chief of Staff of Defence.

We found that things are the same everywhere: also our neighbours are engaged in the realization of a reduced military instrument, agile, flexible and easily integrable in multinational formations.

General, the Austrian Armed Forces have almost completed a complex reform plan. Can you show the readers of "Rivista Militare" the Army for the next Century?

The political and strategic situation in Europe and budget restrictions required an adaption of the organization of the Austrian Armed Forces. Consequently, the new organization has been designed to provide the best military solution to develop our armed forces in the right direction. The strategic situation, the current missions and missions in the not too distant future require rapidly available forces, for international operations. You have mentioned that we have finished our reform of the 1990, and now we are about to assess further developments in two directions: on the one hand we have the political instruction to prepare the right decision whether we will continue to have armed forces on the basis of conscription or change our system to a more professional one. On the other hand the EU has decided in Helsinki in 1999 to build up forces of a strength of about 50,000 to 60,000 troops to be available for Petersburg-Missions (Peace Support Operations); Austria as a member of the EU has to participate in this



development and by this we have to prepare a force of 1.800-2.000 troops. I am not able to predict the development of our armed forces for the next century, but within the next years we will become more professional and the speed of this development will depend on the political decisions.

The Austrian Armed Forces have great experience on peacekeeping under the UN flag. More recently, units of the Army took part in the Multinational Protection Force in Albania and now in Bosnia and Kosovo. Why

Austria ratified the, Amsterdam Treaty and decided to take part in the enhanced Partnership for Peace activities of NATO as well. Therefore it is an obligation for Austria to take part in peace support operations in the framework of the international community. Austria was traditionally very strongly involved in peacekeeping missions under the flag of the UN. After the end of the Cold War a lot of different conflicts spread over the whole world. The increasing number of crises required the intervention of international organisations or single states as

Support Command (AIPSC) is situated at Gotzendorf some 30 Km southeast of Vienna. Though there is a decentralized responsibility throughout the whole armed forces for recruitment and first preparation of troops assigned to peace support operations, the AIPSC is the main organization of the Austrian Armed Forces to guarantee our participation in international and multinational tasks especially by preparation, organisation and completion of peace support operations. The AIPSC is the home base and the training centre for peace support operations for all Austrian contingents and since autumn 1999 has been also a Partnership for Peace-Training Centre. It is also the centre institutional for verification tasks in Austria and abroad.

Austria plays a great role in the regional cooperation in security and defence matters, promoting the CENCOOP with Hungary, Slovenia, Romania, the Czech Republic and Slovakia. Which are the targets and perspectives of this arrangement?

The aim of the Central European Nations Cooperation (CENCOOP) is to improve the capabilities of the participating Nations in order to respond more effectively to peace support operations challenges and to achieve a higher training level through regional cooperation. Objectives are the exchange of views and lessons learned, cooperation in the field of training, logistics and related procedures by standardization and resource sharing, harmonization of policies and doctrines, conduct of common exercises and cooperation in other fields. For the moment the realization projects are to establish a CENCOOP Military Observer Pool, a CENCOOP Military Police, Interoperability Objectives and Standardization Agreements and a CENCOOP Standby Register with a modular composition of preestablished multinational units.



is Austria so deeply involved in peace support operations and which lessons have you learned?

During the Cold War one part of our active policy of neutrality was the participation in UN-led peacekeeping missions. In 1991 we learned what it means to have war close at the borders because of ethnic conflicts as consequence of the end of the Cold War. We have learned that stability within Europe is essential for our security and therefore our main aim of security policy is conflict prevention and peace support.

The Pandur Personnel Carrier for motorized units is the vehicle which many foreign Armies are equipped with.

Lead Nations under the legitimization of the UN.

Some years ago the Austrian Armed Forces have opened in Vienna a training school for personnel assigned to peacekeeping operations. Can you briefly show us the programmes, objectives and perspectives of this school?

The Austrian International Peace



Women in the Army account for 5% today.

Nevertheless the overall situation has changed and we think that it would be preferable to reconsider the objectives of CENCOOP in the near future.

For forty years, Austria was forced into neutrality. Now we have a new political landscape and the situation has changed completely. In which way Austria may change her security and defence policy, while several countries of the region are members of NATO or have a hope to become members?

Neutrality was a main factor of our foreign policy in the last 45 years and it was always only a military neutrality. After the end of the Cold War our strategic situation began to change and is still changing. As you mentioned Austria will be surrounded by NATO-members or neutral countries within the next

years. Austria is ambitiously taking part in the PFP-Programm and is an observer within the WEU. Our new coalition parties have agreed that Austria will take part in the new developments of the EU concerning the building of armed forces to realize all Petersberg Missions if necessary. In this case our neutrality could be overruled by decisions of the EU member states and the Austrian government; a national referendum will be necessary. In all other cases military neutrality will also be in the future one principle of our foreign policy. A NATO membership of Austria is not of relevance to the present situation.

Although Austria is not part of NATO, it is strongly involved in the Partnership for Peace. Can you summarize for us the work in this program? What will be the future of the participation of the Austrian Armed Forces in PFP?

In 1999 Austria participated in PFP exercises and one NATO exercise,

which was opened to partner nations. For 2000 it is planned to participate in some exercises too.

These exercises are possibilities to train Austrian soldiers of all ranks to reach interoperability in all areas, in Major NATO Command's Tasks and in land operations. The second reason is to familiarize Austrian staff personnel with international staff procedures, ROEs, SOPs, logistics and communications by participation in relevant PFP seminars and workshops, CPX, CAX and FTX. Because of budget-restraints we will participate in only one live exercise a year.

The most important topic is to develop common understanding of PSO and enhance military interoperability objectives by training commanders and staff in staff procedures necessary to conduct PSO with MM HQs and Response Cells. In addition we are sending officers to the Swedish International Centre to take part in International Staff Exercises (PKO and PSO). All in all we are trying to



Army vehicles driving through a Check Point.

prepare Austrian soldiers to be ready to work in Combined Joint HQs and Task Forces.

Nowadays we are confronted with the increase of the so-called non-military threats as illegal immigration and actions of criminal and terrorist groups. What may be the role of military forces in this environment? Do you think that the involvement of military forces in these matters could be useful?

Austria has great experience in this field. According to a state law the main task of the Austrian Armed Forces is indeed the military defence of the Austrian territory but further tasks are for instance

disaster relief, humanitarian aid or other assistance to the executive authorities.

Since 1991 the Austrian Armed Forces have had permanently about 2000 troops deployed at the eastern border of the country in order to prevent illegal border crossing.

Since the establishment of the armed forces not a single time there was a year without comprehensive employments. For the armed forces this kind of employment is part of their tasks and they are trained for every sort of mission. Therefore the involvement in these matters does not change their nature. But the real problem is public opinion. The public especially which is involved in such non military threats - and therefore also mass media and politicians demand equipment, training and preparation of the

armed forces for these matters. They doubt about preparations for an unlikely military defence.

In Europe, Austria together with Italy, Switzerland, France, Germany, Spain and Romania have mountain units in their order of battle. How does the future of this kind of units look like? In which direction should they evolve?

Even though there is a «revolution in military affairs» and a technological revolution, we cannot ignore the influence of geography. Austria like the other mentioned countries has high mountain regions. In order to manage tasks in peacetime as well as wartime it is therefore necessary to have available appropriate equipped and trained troops.

Austria can see the necessity of

International commitments have increased also for Austria.

mountain units; we have deployed a unit on the Golan heights in a peacekeeping operation under UN flag. Geography does not change. All the technological developments cannot compensate this kind of units, therefore they will play an important role also in the future.

Austria has adopted an original defence model based on the militia system. Which elements characterise this system? What will be the future of this system in relation with the evolution of conscription in your country?

In Austria the militia system means that the main strength of combat forces evolves through mobilization of Reserve Forces. Till 1992 most parts of the peacetime organization were only used for training purposes and all greater military missions relied on mobilization. The wartime strength was about 220,000 soldiers.

That has changed significantly. The peacetime force structure nowadays has at any time approximately 10,000 soldiers in readiness plus 5,000 additional reserves available without mobilization. The remainder of the armed forces is in the training phase or organized as cadre-forces. After mobilization the strength of the Austrian Armed Forces is about 100 000 soldiers.

As in other nations there is an ongoing political discussion about the end of conscription in Austria. The working program of the new government has installed a commission of experts, whose task it is to assess the conditions which are essential to finish our system of conscription.

□

** Journalist*



General Horst Pleiner was born on November 14, 1941 in Salzburg, where he completed his pre-university studies in 1959. The same year he enlisted in the 29th Infantry Battalion. From 1960 to 1963 he attended the Military Academy in Wiener Neustadt, graduating at the top of his course, and was assigned to the Saalfelden Infantry School. He served as Deputy Commander of the Reserve Officer Training Company and instructor for heavy infantry weapons and, later, as chief instructor for anti-tank defence and staff officer training.

In 1972 he graduated, first in his class, from the three-year General Staff Officer Course at the National Defence Academy in Vienna, and was assigned to Gruppenkommando III in Salzburg as G3, and then CoS, chief instructor for logistics, tactics and staff officer training at the National Defence Academy.

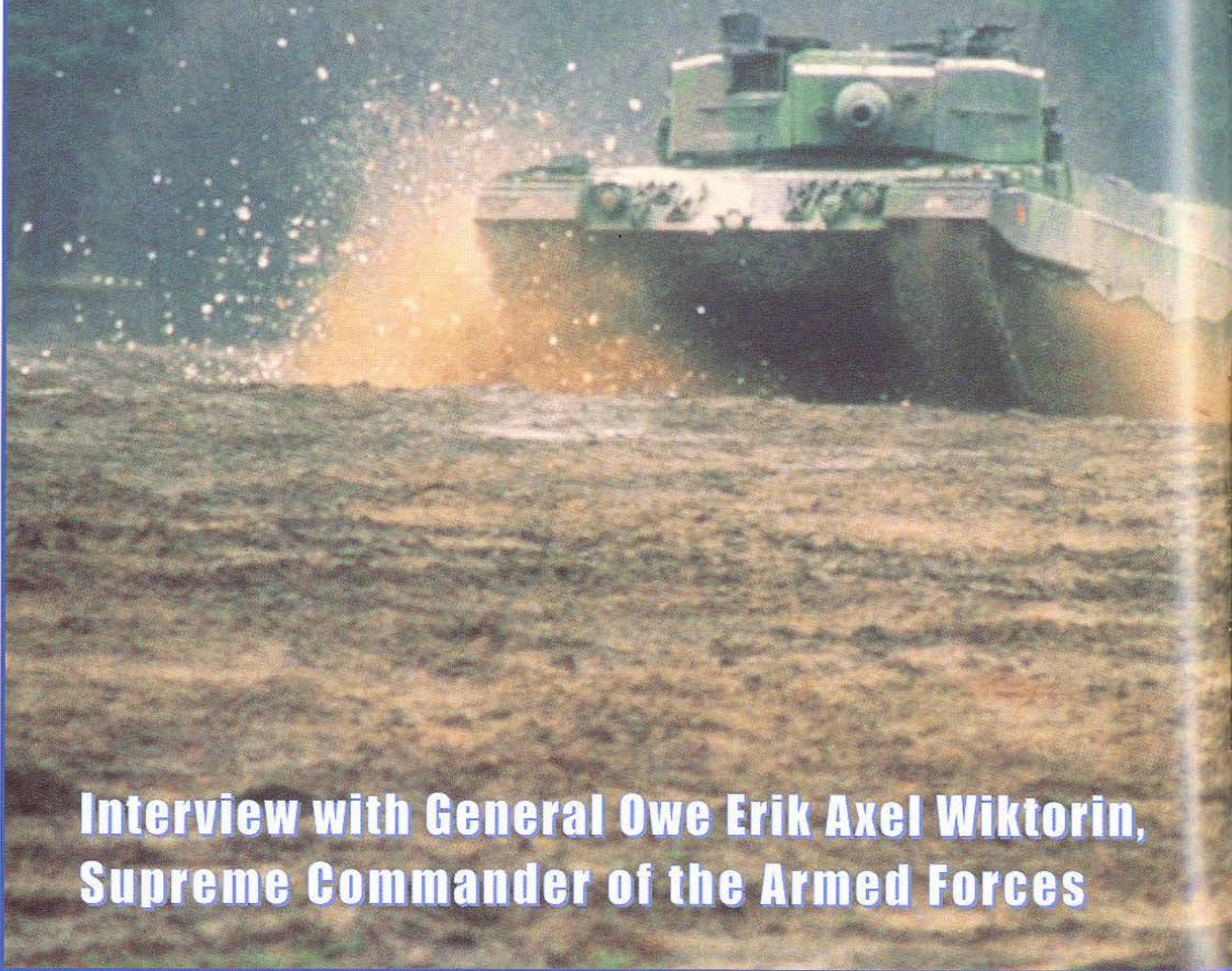
In 1978 he served at the MOD Operations Division as Officer in charge of operational control, and subsequently assumed the command of the 22nd Militia Training Regiment. In 1986 he returned to MOD, where he became Head of the Operations Divisions.

In 1999, he was appointed Deputy Chief of Defence and, after his promotion to General on January 1, 2000, Chief of the Defence Staff. General Horst Pleiner has written and published several articles and essays on weapon systems and other defence - related matters.

SWEDEN

THE NEW ARMED FORCES

by Enrico Magnani *



Interview with General Owe Erik Axel Wiktorin,
Supreme Commander of the Armed Forces

Sweden is future-oriented and has decided for light and flexible Armed Forces to face international commitments. This and much more in the interview with the Supreme Commander of the Armed Forces.

General, can you make a description for the readers of "Rivista Militare" of the Royal Swedish Army of the next Century? What will be differences with the land force of today?

The cold war is over and the technical development is undergoing a revolution. New technologies create new potentials at the same time as they create new threats. Modern society is vulnerable with its dependence on information, finance and communications systems

Information technology is radically changing the conditions for the development of military organisations and resources. Combat forces of conventional type will continue to be of great importance, providing the basis not only for a country's defence but also for peacekeeping and peace enforcement.

The capacity for armed combat will continue to be the governing factor for the development of the Swedish Armed Forces. Armed combat sets high demands on competence, equipment quality, command and communications. If the Armed Forces are to be able to meet a broad threat spectrum in the future, the organisation must be made more flexible. The trend is towards powerful, mobile units that can be used as various types of task forces at short notice.

The aim is a long-term development of the Armed Forces





Winter 1994. A UNPROFOR patrol of Swedish soldiers.

towards a goal based on future needs and potentials. For this reason, the Armed Forces will be given a new orientation as a basis for further development aiming more towards the future than towards the defence from an invasion as it was during the Cold War. In the future, the Armed Forces should comprise operational task forces as well as protective forces. The operational task forces must have the ability to conduct co-ordinated operations and to co-operate with other parties in international operations. They should be developed from today's operational units to meet changing threats and risk scenarios. The Armed Forces must be able to repel an armed attack and to defend the country's territorial integrity and support the community under difficult

conditions in peacetime.

The Swedish Army has a great experience on the field of peacekeeping, started with the League Nations, followed by a lot of commitments with the UN and now with troops in Bosnia and

Kosovo. Why is Sweden so deeply involved in these operations and what lessons have been learned?

For a long time the Swedish



"Patria 180" APC, made in Finland and in service with SWEBAT in Bosnia.



people have taken part in a special way, in the activities concerning human rights, and our political leaders have been active in the UN since its foundation. Therefore, our participation in Peace Support Operations in several countries was a natural process. We gained a lot of experience and learned that those operations must be based on a doctrine. Sweden has had a joint doctrine for PSOs for about two years. However, there is still much to be learned, and future operations will have to be considered and studied in a process structured according to the lessons learned, in order to know more, and to establish a basis upon which new conceptions can be developed. All our experiences are entered in a "lessons learned" data base.

Looking at the past as well as at the recent events in Kuwait, Somalia, the Balkans and Timor, peacekeeping seems to be changing some of its theoretical

characteristics. Do you think that this new humanitarian approach will change even more in the near future?

In accordance with the PFP agreement, Sweden participates in joint exercises with other Nations, in order to promote interoperability and to ensure the possibility of setting up multinational forces capable of carrying out Peace Support Operations. A clear indication that things are changing can be seen in the Balkans, where one can feel the need for a clear coordination between civil organizations and the military.

Civil-Military Cooperation (CIMIC) is now a priority in Bosnia Herzegovina. Sweden has redeployed its battalion but continues to operate in the CIMIC sector. Up to now, CIMIC has not been considered within the PFP exercises.

Sweden, neutral since the past Century, during the Cold War

Training at the Army Peace-Operations School.

developed an original defence model employing great resources to defend the country from any invasion. Now the concept of force projection is the cornerstone of the contemporary thinking. Do you share this emphasis?

The adhesion to PFP was a natural step for Sweden. It is a way to create peace and stability, as well as to join peoples together. The Swedish people have wide daily relations with all Countries in the world in many sectors: political, cultural, economic, industrial, commercial, etc. So, as physicians and students are generally considered a unique reality, it would be good if similar relations were established also in the military field, in order to foster the process of peace and understanding.



Army specialists clearing a minefield.

active instrument in security policy has increased in recent years. The ability to prevent or reduce conflicts before they spread is of benefit to the security of Europe and Sweden. As a result, Sweden is developing its international activities and the Armed Forces must respond to this increased demand.

What will be the operational capability of the Swedish Army after the planned cut of 7 Brigades (out of 13), 15 regiments, 2000 officers, plus 6000 soldiers and around 1000 civilians?

We have not yet received the exact figures but the operational capability will be leaner with great flexibility to meet different threats. We have competent personnel and the equipment will be of very high technical standard. However, the Armed Forces will have to expand in order to prepare for possible a large-scale attack. The Armed Forces will also be designed to meet the increasing demand for international operational crisis control.

Several countries, among which Italy, are oriented towards all-volunteer Armed Forces, and,

Several members of the EU, in which Sweden participates, expressed their will to strengthen the European pillar of NATO. How can this be compatible with Stockholm's wish not to enter permanent military Alliances?

It is a political question but, the objective of security policy - to preserve a country's freedom and independence - remains steadfast. At the same time, the political ambition of using the Armed Forces as an

An Officer from the SFOR Swedish Contingent planning an operation.





A Viking camouflaged for winter. In a short time all Swedish mechanized units will be equipped with this system.

at the same time, are reducing the number of conscripts and the duration of conscription. The Swedish Army has a large conscript component. how do you consider this trend?

The conscript training system must be changed. We now have an ongoing debate in Sweden and we are reviewing the conscript system. The ability of the Armed Forces to carry out their duties must form the basis of the training system. The new structure requires a more flexible system and the training of conscripts must be meaningful. Training should be oriented towards a greater scope. If only a part of each annual conscript group gets basic training, the merit value and financial terms for military service

should be reviewed.

The Swedish defence model attributes a great importance to the reserve forces: Wit the gradual reduction of conscripts, how will the mobilization apparatus change?

The increased demand of flexibility

will transform the reserve Officers into an even more important resource. In the future they should have a greater opportunity, as compared with conscripts, to participate in training activities.

□

* Journalist

General Owe Erik Axel Wiktorin was born on May 7, 1940.

He attended the Air Force Training School (1961-1962), the Air Force Academy (1963-1964), the War College (1971-1973) and the USAF Air Command and Staff College (1979-1980).

From 1964 to 1969 he served as a fighter pilot. Later, he commanded an Air Force Group and, from 1971, held several positions at the Defence General Staff, where he has appointed Chief of Staff in 1991. In 1992 Gen. Wiktorin was appointed Commander of the Southern Command and, in 1994, Supreme Commander of the Armed Forces. He has been awarded several medals and Orders of Merit, and is a member of the Royal Academy of Military Sciences.

Gen. Owe Erik Axel Wiktorin is married and has two children.

LESS FORESEEABLE LINES AND RELEVANT METHODS

by Giovanni Semeraro *



Decision making methods and Commanders' training have always been among the keys for success in war operations.

The topical reference to Caesar's victory at Pharsalus, against Pompeius Magnus, is an effective introduction to the role of the less foreseeable lines.

But a question seems to persist: is there a method for the elaboration of these strategies, and what could be the specific support provided by applied simulation?

TO ALL COMMANDERS AND CHIEFS OF STAFF

The danger really exists that Rommel should become a kind of wizard or bugaboo for our troops, which are beginning to talk too much about him. He is undoubtedly a very resolute and capable man, but he is absolutely not a superman. And even if he were a superman, it would be disgraceful that our men should credit him with supernatural powers.

Gen. C.J. AUCHINLECK
Commander-in-Chief
of His Britannic Majesty's
Forces in the Middle East



On August 9, 49 B.C., on the left bank of the Epineus river, near the ancient Thessalian city of Pharsalus (today's Farsala), two of history's greatest commanders were facing each other: Gnaeus Pompeius Magnus, with about forty-five thousand foot-soldiers and seven thousand cavalymen (equivalent to one half of the present Italian operational land-forces), and Gaius Julius Caesar, with approximately twenty-two thousand foot-soldiers and one thousand cavalymen.

Caesar was at a great disadvantage, owing to the unfavourable ratio of 2 to 1 as concerned infantry and 7 to 1 for cavalry. He had just returned after the defeat of Durres but this time he did not have to cope with disorderly hordes of Celts or Germanics, but with Roman-type legions (two of them had previously served under his command) and a strong cavalry, led by Titus Labienus, the old fox, Caesar's best legate during the Gallic wars.

The next morning, Caesar's forces had killed fifteen thousand enemies and captured twenty-four thousand soldiers, losing only two hundred men.

Pompeius fled in disgrace and was later murdered in Egypt, unknown to Caesar.

What was the decision-making process that convinced Caesar to adopt the winning strategy?

Or, even before that: is there a theoretical "decision-making" method, capable of "consequently" reproducing a manoeuvre plan like the one adopted by Caesar in 49 B.C.?

In order to answer this question, we should first outline the manoeuvre plan adopted by Caesar: in the Pharsalus plain, the western flank of both armies was protected by the river, therefore the respective cavalry forces drew up on the other flank, the right for Caesar and the left for Pompeius.

To make up for the weakness of his cavalry on the right, Caesar decided to thin the ranks of his already reduced legions, recovering



Paratrooper NCO positioning a line for the explosion of charges.

the conduct of the enemy and, in consequence, acted in such a way as to take them by surprise.

The surprise realized by Caesar affected the enemy formation (with a surrounding manoeuvre) and the morale of Pompeius' troops (that faced the spectre of a total rout), and led to their final collapse.

This is, in an extreme synthesis, what happened. Let's go back, now, to the initial question: is there a theoretic method capable of working out such strategies?

If one makes a simple exercise of formal and non-contradictory logic, the conclusion is that such a method could not exist: **Reductio ad absurdum:** *even if the method existed, it would be very difficult to teach it to the Commanders and Staffs and - at the same time - to conceal it from the enemy.*

But if the enemy also knows and applies the method, what then?

Do both opponents win? Caesar against Caesar?

This obvious and even superfluous consideration makes it very clear that such a method does not exist.

What then? One can propose methods which are really "non-methods" but rather "Guidelines" of the decision-making process; they work as "control lists", in order to help the deciders in considering all aspects of the operational problem.

In my opinion, the "method for the solutions of the operational problem", currently in force in the Doctrine of the Italian Army, belongs to this category.

In my article "The intuitive method in the decision-making process" (Rivista Militare, It. Ed, no.3/98) I expressed very clearly my opinion on this method, which was made official in 1972 by the publication SMD-104 "Manual for

a certain number of cohorts that he deployed on the right flank, among and behind the cavalry.

The first clashes, in fact, took place between the respective cavalries, and Labienus' men, superior in number, rapidly forced Caesar's cavalry to withdraw, as Pompeius expected.

The successive step, for Pompeius and Labienus, was the encirclement of Caesar's right flank by the victorious cavalry, and the progressive disruption of Caesar's legions, from east to west. They had been engaged by Pompeius' legions, and it was unlikely that they could withstand a simultaneous pressure on the front and on the right flank, with the other flank closed by the river. What happened instead?

Labienus' cavalry in the impetus of the pursuit ran just into the staunch cohorts deployed by Caesar on the right flank, which were firmly arrayed in defence.

Pompeius' cavalymen scattered, lost their élan - which is the very advantage of the cavalry - and in a short time were killed or routed.

At that point, Caesar's cavalry, although reduced, went back to the offensive and surrounded the left flank of Pompeius' legions which, unable to break the centre of Caesar's deployment and seeing that they were attacked from the east, were discouraged, started to give in and finally turned round and fled *en masse*.

What was the winning element of Caesar's strategy?

The answer is simple: he foresaw



"Centauro" armoured car in fast motion over a dirt road.

Joint Staff Service". I objected by stressing the need to focus the activities of analysis and synthesis of military situations and problems, at an almost unconscious, "subliminal" level, through intense simulation activities (at various levels), open study of military doctrines and exhaustive historical reconstructions of past war events.

The Army General Staff has recently issued the first draft of a new publication, "Command and Control" (a volume of no less than 344 pages).

Because of my permanent professional distortion, as soon as

the book was in my hands I started to look for what really interested me: the decision and planning process (in Italian: Processo decisionale e di pianificazione; acronym: PDP).

Well, after a careful examination of the matter one can notice that actually, at the PDP's "critical moment", on the whole nothing has changed with respect to the past: having considered mission and situation, on the one hand one defines his own line of action (in Italian: Linea d'Azione Propria - acronym LAP) and, on the other, the possible actions of the enemy (in Italian: Possibile Azione del Nemico, acronym PAN). LAPS and PANS are then compared and the most suitable LAP is selected, exactly as was stated in 1972.

Is it really impossible to improve this method?

Without prejudice to what I expressed in the abovementioned article, i.e. that the deciders should practically develop their "decision sensitivity" and the capability of freeing themselves from any mould, it is however evident that, from the theoretical point of view, it would be difficult to criticize the "method".

But let us try to apply it to a concrete case: the battle of Pharsalus.

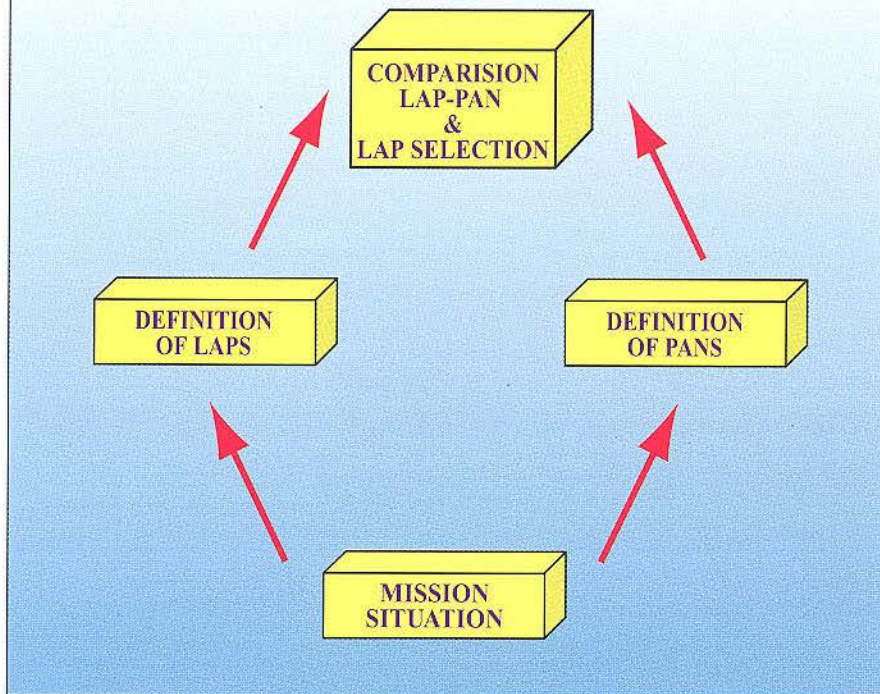
Mission. For both opponents, the destruction of the enemy.

Situation. Terrain: level ground, easy to travel, enclosed between a river and a hill-chain.

Opposing forces: Pompeius' troops are superior in number, as

Fig. 1

"TRADITIONAL" METHOD (IN PARALLEL)



previously mentioned, but Caesar's forces are tougher.

Decision of the LAP: I think it's obvious that, at first sight, it is not easy to make out the LAP adopted by Caesar. I have no doubt that it could probably be constructed within the different options, but is it possible to make it immediately evident?

Let's follow another path: before thinking about LAPS, we could consider PANs.

Is it possible to find a PAN in a simple manner?

I should think so: Pompeius has a numerical superiority, which is downright overwhelming in the case of the cavalry. The river compels the two armies to deploy their cavalry on the east flank. In order to exploit his superiority, Pompeius will certainly employ his cavalry, attempting to surround Caesar's east flank where the terrain and the weakness of Caesar's cavalry can give him the opportunity of attacking also the flank of the

legions, and not only their front.

Once this PAN has been defined as the most probable (and most dangerous!) one, we have a "starting point" on which we can build a LAP: protect the right flank and disrupt Pompeius' plan.

How can we do that, without additional cavalry?

There are not many choices: the only solution is to painfully reduce the lines of the legions, recover some infantry cohorts and deploy them behind the cavalry, in order to protect the fleeing Caesarian cavalry and withstand the thrust of Pompeius' mounted soldiers.

After crushing Titus Labienus' cavalrymen, the Caesarian survivors, in their turn, should attack Pompeius on the east flank, very probably taking him by surprise.

Trying to draw a kind of "method" from this example, I feel I could list the following steps (successive to the examination of Mission and Situation):

- consideration of the various

PANs (without assuming that the enemy should necessarily follow his doctrine!);

- selection of the PAN (following the twofold criterion of probability and dangerousness);
- construction of the different LAPS capable of opposing the selected PAN;
- selection of the LAP which offers the best possibility of achieving surprise and deceit.

The substantial difference between this approach and the traditional process is that LAPS and PANs are not thought out separately and then compared, but LAPS are directly built "after" and "on the basis" of the PANs, whose elaboration is the most important and delicate phase of the entire process. It is not a parallel procedure, but a consequential one.

This "non-method" method, applied to the case we are discussing, seems to lead, "consequentially", to Caesar's LAP.

Have we discovered Caesar's Method?

Let's make another example: 1940, French front. After months of inactivity ("the odd war") the Germans decide to take the offensive on the western front; if we were in their place, how would we attack?

Determination of the PANs

Very shortly: both opponents are aware of the solidity of the Maginot line, therefore the Anglo-French will very likely deploy their formations in defence of the northern section of the front, to the north of the fortified line, expecting that the Germans will make a surrounding manoeuvre precisely from the north, taking as a model the "Schlieffen" Plan, which had almost succeeded in WWI.

Selection of the PAN

There could be others, but the

most likely and most difficult to overcome seems to be exactly the one expounded above.

Construction of the LAPs capable of opposing the PAN

Among the various LAPs, one consisted in striking, with the bulk of the motorized and armoured forces, through the Ardennes, between the French and the British forces, pushing back the French to the south-west and the British to the north-west, penetrating between the two armies and breaking the front.

Selection of the LAPs which better guarantee surprise and deceit

The lap just described presented several difficulties, especially considering that the armoured forces would have to move through large wooded areas, but it was adopted precisely because it seemed to assure the surprise-factor in the best possible way.

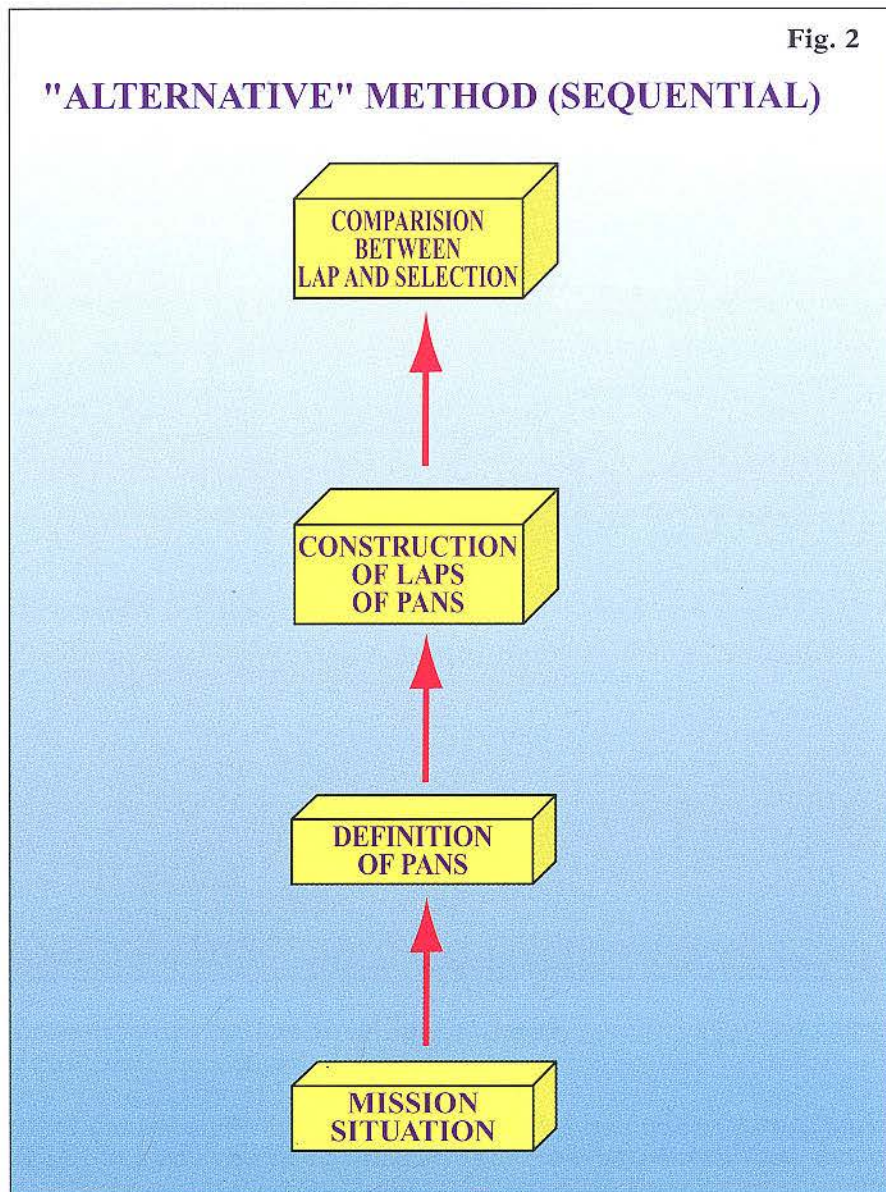
In other words, the construction of the LAPs on the basis of the PANs seems to be the keystone for the best realization of surprise. The two processes are represented in Figures 1 and 2.

All the great "deciders" of history have always stressed the fact that surprise is the key to success.

This is why the decision process should proceed along guidelines capable of facilitating and enhancing the achievement of surprise.

It is not futile to observe that a method of this type (on which the Israelis have constructed an entire thesis about the conduct of war, suggesting, whenever possible, a paradoxical decision in order to make military moves along the "less foreseeable lines") is "something for smart people".

As a matter of fact, to actually achieve surprise always entails a certain risk, which can be reduced



if the attention is focused more on one's own mission and on the capabilities of one's own forces rather than on the possible actions of the enemy.

In this respect, E.N. Luttwak notes that "...by definition, any decision made in order to achieve surprise must have a certain cost (spreading some false information is not enough...). The cost consists in the loss of a part of the capabilities which would be otherwise available (at Pharsalus, Caesar had to weaken the centre and the left flank...). Similarly, in order to act faster than the enemy expects (on the basis of his calculations of our preparation

times) it is usually necessary to resort to drastic decisions, which could very likely impede the full utilization of men and materials, foregoing a precious part of the preparation...".

On the other hand, the achievement of surprise is impaired when the decision processes are carried out in an exceedingly standardized and doctrinal manner. This is what Rommel wrote in this connexion:

"Prejudice against novelties is typical of any Officer Corps trained according to a well-tested and proven system. This was the reason why the Prussian army was defeated by Napoleon. The same



A "Bersaglieri" Check-Point in Kosovo.

prejudice was evident during WWII, among both British and Germans, when the Officers, because of complex theories, lost the capability of adjusting to the reality of the situation.

A military doctrine, built down to the smallest details, was considered the "non plus ultra" of military wisdom. According to those "doctrinaires", only the conceptions that followed their standardized rules were acceptable.

Anything outside the limits of these rules was considered hazardous and risky: if the result was good, the reason could only be luck or chance.

This prejudice caused incalculable consequences.

It is not difficult to note that we, being by now devoted heart and soul to the NATO doctrine and

standardization, could stumble exactly into what was described by Rommel (at present, we are protected by the absence of an enemy potentially equal to NATO, but things could change).

An example of this risk? In a very interesting article (Rivista Militare, It. Ed. no.6/98), Col. Pier Paolo Lunelli pointed out that, in compliance with NATO procedures and methods, any deviation from the original plan entails, starting at Joint Force Commander level, a phase of "cascade" replanning among the different command levels. As a consequence, on the battlefield the correction can take place after no less than 120 hours, i.e. five days after the deviation is considered!

I think this is inconceivable, but NATO's Anglo-Saxon philosophers solved this "inconsistency" by saying that Commanders at the various levels must "live in the

future". Indeed, the higher they are the farther is the future in which they should live. Unfortunately, by doing this, they risk to live in "their own" future, different from the one that will actually occur, desperately trying to plan in advance anything which could happen on the battlefield (impossible!).

So it happens that, at the moment of entering Kosovo, after spending months and months planning everything that could be planned and applying all the known methods, all of a sudden a small group of Russian armour occupies Pristina airport, upsetting the whole western manoeuvre, embarrassing politico-military leaders and confusing public opinion.

Where were the NATO deciders when the Russians started to move? Perhaps they were still in "their" future, and returned too late to react.

An unforeseen event, a deviation, modified the situation indefinitely, before the NATO C2 chain could find the way to solve the problem. Many diplomatic efforts, and a long time, were necessary to solve the crisis.

What were the PANs at the disposal not of the Serbians... but of the Russians? After an armed intervention at the Serb's side, the next most dangerous PAN was precisely an autonomous entrance into Kosovo.

But it was difficult to focus the attention on such a PAN, since almost all resources, in terms of planning capability, were concentrated on "our own manoeuvre" and "our own future".

But perhaps I am digressing, and I don't want to give the impression of being uselessly critical.

Actually, it is possible to reach the same decisions in both the previously described ways, either by working out LAPs and PANs in parallel and then comparing them, or by constructing the LAPs on the PANs, provided that the deciders be able to make good analyses and

Control of the territory is an irrenounceable activity, especially in "out of area" operations.

syntheses, and be endowed with intuition and creativity.

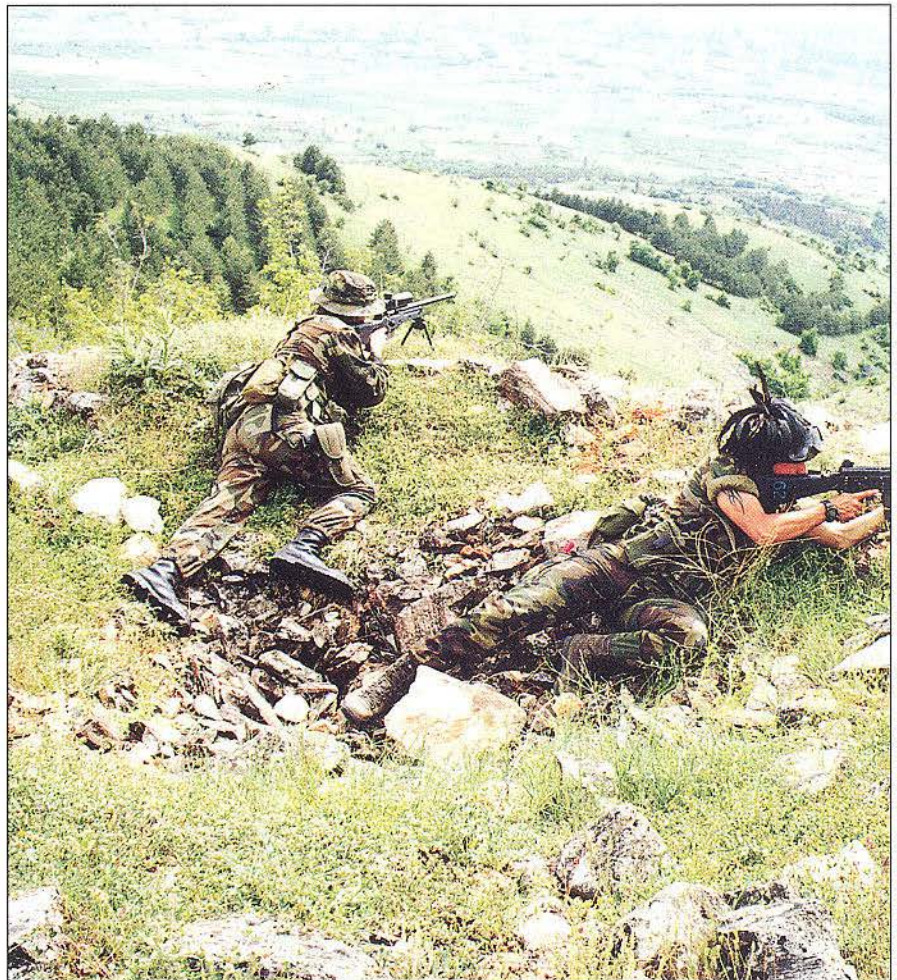
I believe that the second way permits, on the one hand, to detect, already from the beginning, the LAPs incompatible with the PANs, in order to avoid having to discard them during the comparison, saving (precious) time and, on the other, to avoid the *a posteriori* adaptation of the selected LAP on the basis of the inevitable "adjustments" that will emerge during the comparison.

It is also true that, before the analysis of the situation, it is necessary to carry out the IPB (Intelligence Preparation of the Battlefield) aimed also at bringing out the weak points and vulnerabilities of the enemy, in order to better elaborate one's own LAPs. But this refers essentially to the "intrinsic" vulnerabilities of the enemy, not to those connected with his presumable manoeuvre: the latter can only be pointed out during the elaboration of the PANs.

To start from what the enemy will presumably do, in order to work out a way to oppose him, cannot but be the best way to achieve the surprise more easily.

Therefore I believe that, if one wants to suggest a guideline for this delicate phase of the decision-making process, one should plan it as I stated previously rather than proceeding according to the traditional "system". I am also aware that this kind of problems could be discussed for days and days and with hundreds of pages, without reaching a final solution.

In this regard, it could be interesting to carry out the following experiment: select a historical event (not the battle of Pharsalus, it is too well-known...), take away the initial situation and give it, as an exercise, to a relatively numerous group of Regiment, Brigade or Division



Commanders, not aware of the development and historical outcome of the event.

In this case, in fact, there would really be the so-called "Chair's solution" (Caesar's strategy at Pharsalus), and it could be seen how many commanders would actually find out and select that plan of manoeuvre.

I don't know the scientific value of such a test, but its results would certainly be interesting.

I would like to suggest, as an example, "Operation Gazelle", conducted in the Sinai desert in 1973... whose development represents a great lesson in the art of war.

It is not by coincidence that this was an action conducted by the Israeli Armed Forces, which, since the very beginning of their history have always been applying the principle of the "Less foreseeable lines", and, by almost always

succeeding in correctly finding the enemy PAN, had a victorious outcome also in situations of extreme inferiority: would we be capable of doing the same?

Rereading these notes, I cannot overcome the feeling of having "discovered hot water". But (who knows?), since Major Units of the Italian Army have not been engaged in combat since WWII (where Commanders did not exactly shine for their decision-making capabilities), since very few opposing-parties, open-outcome exercises are conducted (or should I say none?) and since so little "simulation" is done, perhaps, now and then, also the "rediscovery of hot water" could be useful.

□

* Major,
Support Command,
Land Forces (FOTER)

SIMULATION AND COMBAT TRAINING CENTRES

by Fabrizio Castagnetti *



The Army Chief of Staff, Gen. Francesco Cervoni, taking into account the results of an ad-hoc Project Study, provided for the setting up of two special Command and Control Centres and two Unit Training and Evaluation Centres.

A special Project Group, supervised by Gen. Andreani as Project Manager, has been tasked to set up these structures within the War College in Civitavecchia, the Infantry School in Cesano and the training areas in Capo Teulada and Monteromano.

The Group has been working for some months now and will hopefully carry on its tasks in the future to fully establish the above-mentioned Training and Evaluation Centres.

The prerequisite to reach this goal within the established timeline is the allotment of sufficient financial resources, together with coherent actions and unity of efforts. An effective information campaign is also required, directed both towards the military and those sectors of society appreciating the organization and the efficiency of modern Armed Forces.

This article summarizes the conferences held at the turn of the year 2000 to all personnel of Intermediate Operational Commands, Brigades and Training Schools/Institutes and to Regiment/Group Commanders.

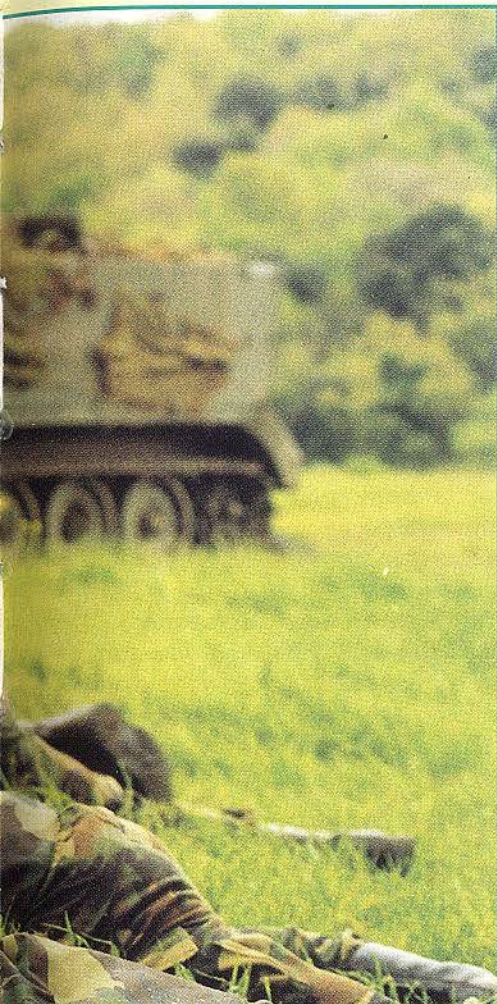
All Simulation and Combat Training Centres belonging to the US Army and also to the armies of

the most important European nations (Germany, Great Britain and France) widely employ simulation systems which, thanks to the constant progress of technology, allow for increasingly realistic and sophisticated training activities.

At this point the various types of simulation employed by the military are to be briefly explained in simple terms, hopefully comprehensible at training-operational level, to illustrate an extremely complex and technical subject.

SIMULATION

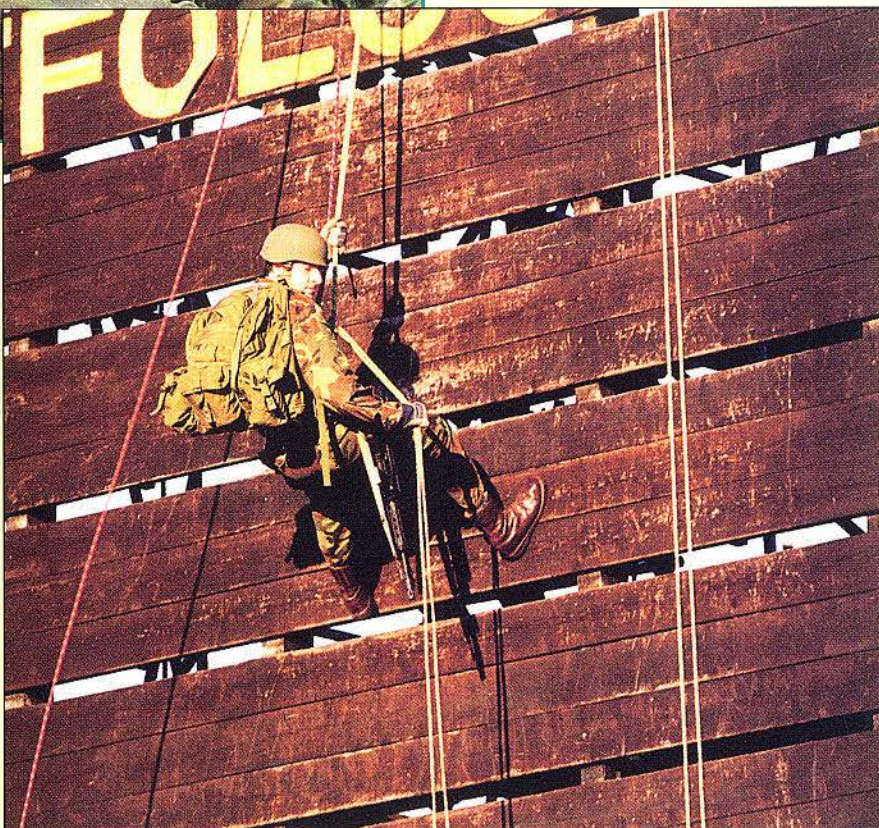
Based on the terminology employed by Col. Campregher, former Military Attaché in Bonn



*The Italian Army
is being
committed to
multinational
operations at
short notice.
Therefore it must
be organized and
capable of
understanding
whether its units
and Commands
are combat-ready.*

and author of a valuable document on the subject, and by the US military as well, there are three kinds of simulation.

- Live simulation, when units train in the field, employing their equipment and weapon systems. Battle simulators, such as laser rays and pyrotechnics, are used to replicate weapon fire effects. Personnel operate in a real environment, applying the relevant procedures and facing the fatigue, stress and harsh conditions connected with field operations. This kind of simulation takes place at Combat Training Centres.
- Virtual simulation, when surrogate weapon systems are employed and a simulator artificially represents both the situation on the ground and the enemy forces. Guide, fire and flight simulators are already in service, while mission and combat simulators for small tank/mechanized units are under procurement by the Cavalry School.
- Computer-assisted simulation, when the representation of the battlefield is completely managed by the system, based on the instructions from the Command Posts, usually deployed on the ground and from the computer-assisted wargames played in class. The system employs computer-resident data bases and templates. This kind of simulation takes place at Command Posts' Simulation Centres.



SIMULATION CENTRES

A simulation centre is usually made up of a small permanent staff, comprising 10 Officers/NCOs, and a two-storey building accommodating a Control Station, one or more briefing rooms (for after action review as well), one room for "enemy" operations, 25-50 workstations (depending on the level, Tactical Group/Brigade).



Technology is becoming increasingly important in the battlefield.

Each workstation is equipped with a computer and 2-3 displays. Brigade/Tactical Group Command Posts are deployed on the ground and the operators at the Simulation Centre workstations, usually the company/platoon leaders, simulate subordinate units and other assets, as decided by the exercise manager. Command Posts in the field and operators at the Simulation Centre employ the communication system already in use, thus allowing Commanders and staff to easily monitor simulation activities. Based on Command Posts' orders, simulated force on force engagements are fought and the related results are used to constantly update the decision-making process. Observers/Controllers may be assigned to Command Posts to verify staff training level and develop the after action review phase.

Nations which already use Simulation Centres generally have their own systems and software. The Italian Army lacks both the time and the resources necessary to follow suite and prefers acquiring the best off-the-shelf system presently available, i.e. the German SIRA.

COMBAT TRAINING CENTRES

A Combat Training Centre is mainly made up of five elements:

- training area
- fielded forces (those undergoing training/evaluation and opposing forces -OPFOR)
- instrumentation system
- Observer/Controller/Fire Marker Group (O/C Group)
- logistic-administrative support infrastructure.

Training areas should be large enough to allow for 2-3 days of continued force on force engagements, with the possibility of staging different tactical attack and defense actions, meeting engagements and so on.

The dimensions of training areas, both in width and depth, are to be taken into account to establish the number of troops to be trained, acting both as BLUEFOR and OPFOR. Monteromano and Capo Teulada firing ranges measure 46 and 72 square km respectively. They are certainly small, compared to the training areas used by Germany, Great Britain and the USA in Europe (Hohenfels, GE), which range between 200 and 320 square km.

This fact adversely affects training possibilities, mainly owing to a limited space in depth; therefore only company-level force on force exercises can be carried out and a single tactical action at a time can take place for no more than two consecutive days.

Capo Teulada allows for staging special and extremely suggestive tactical actions, like beach operations which cannot be effected in many other ranges.

However, the possibility of training a limited number of forces only has not had extremely negative repercussions. In fact, Capo Teulada and Monteromano can be employed 8 and 9 months in a year respectively. Thus 36 training cycles, lasting 14 days each, can be carried out, comprising blank training, force on force exercises, with the use of battle simulators, and final live exercises, employing targets in the enemy role.

During these 36 cycles, 36 reinforced company-level units - made up of about 210 men, Officers, NCOs and troops - are trained to play as BLUEFOR, together with 36 OPFOR units, of similar strength, though their number may change according the hypothesized tactical situation.

Accordingly, our 38 Combat Regiments, to be shortly downsized, will be able to use one of these training areas almost once a year. These are extremely favourable conditions, even better than American and German troops' training standards.

The Italian Army should obviously revise the possibility offered to Nato commanders to conduct multinational exercises or, in presence of pressing political requirements, "swap" it with the possibility of employing other European Training and Combat Centres at favourable conditions.

Given the limited dimensions of our ranges, rehabilitation works to enhance road networks and fully exploit these areas are being carried out by some Engineer Companies selected by the Support Command.

In short, Capo Teulada and

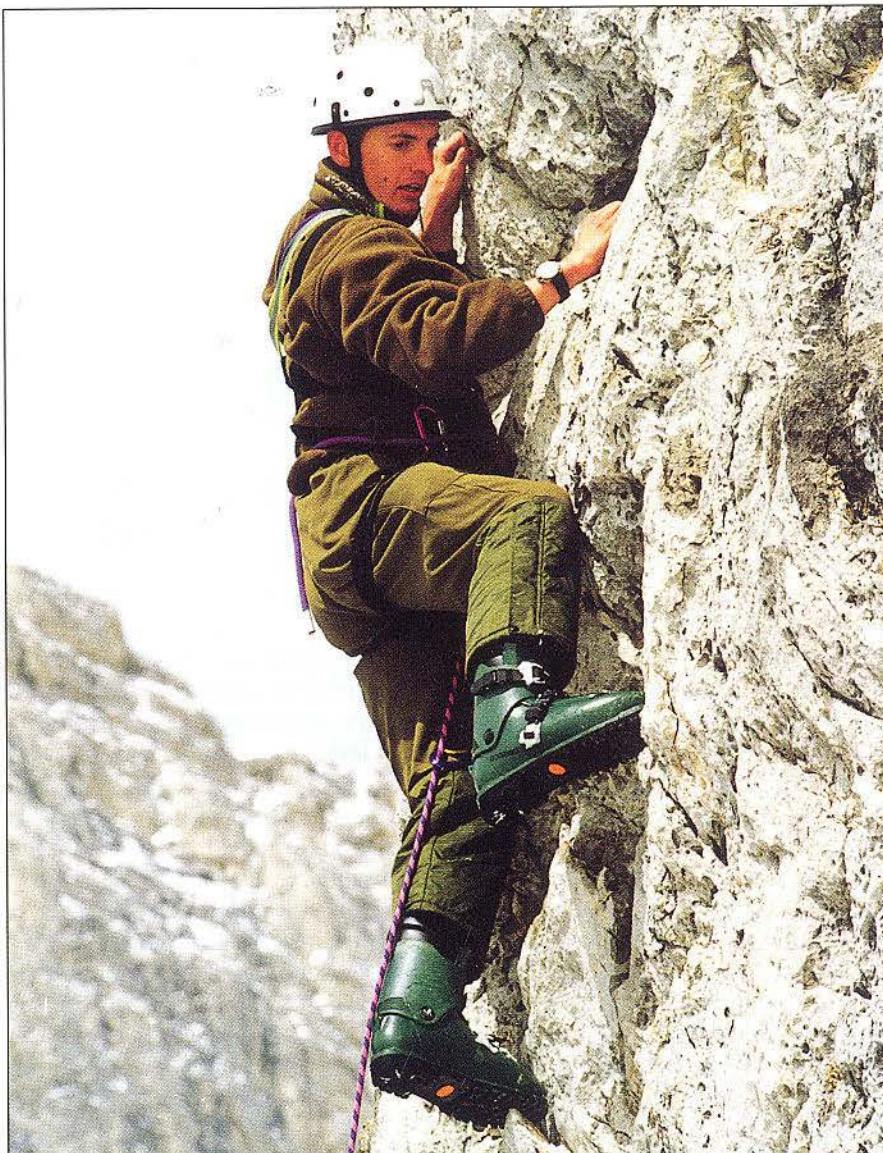
Monteromano ranges are the only facilities of this kind in Italy. They meet our requirements, even if in a limited way, and should be equipped and developed to be fully operational, without ruling out the possibility of enlargement by acquiring adjacent plots of land.

The opposing forces (OPFOR) should know the tactical and employment concepts of potential adversaries and may be initially drawn from a different Regiment from that undergoing training, belonging either to the same or another Brigade. These forces may eventually be stationed at the range, to be fully trained and dedicated specific tasks, complying with cost effectiveness requirements.

The instrumentation system is the technical part of the structure and should allow for collecting, formatting, displaying, analyzing and recording exercise data. It is made up of several sub-systems performing the following functions:

- display and recording the outcome of simulated engagements and firing actions
- communications and data transfer
- targeting of the range
- Control Station
- after action review (AAR).

In particular, with the employment of vehicle/weapon mounted equipment or personnel systems (combat simulators, GPS, data processing units), and the range antennas and repeaters, the data communication and transmission system can display position data, status, possible kill capabilities and number of rounds available to each weapon system. Data are delivered in near real time (every 5 seconds for vehicles/weapon systems, every 20-30 seconds for single soldiers). Fire control systems are to be calibrated (both incoming and outgoing fire), to replicate the



functioning of simulated weapons. The above-mentioned system can also simulate three different effects on vehicles/men/weapon systems (near hit, damaged/wounded, destroyed/dead), corresponding to different acoustic and light signals. Area weapon fire effects are computer-simulated at the Control Station or automatically transferred by an Observer/Controller/ Fire marker, equipped with a laser gun, to a vehicle/weapon system/soldier, based on their real position (transmitted by the GPS) and the kind of weapon/mine/chemical agent employed.

The so called "fire effects generators" are activated at the same time, to create the noises, blaze and smoke typical of a battlefield.

TV cameras are generally placed in some sectors of the range, to film the most significant tactical actions and manoeuvres which are to take place. They are mounted on fixed stations equipped with high-power telelenses or placed on mobile and fully equipped video-vans.

Lastly, the data communication and transmission system allows for hearing and recording all tactical radio communications taking place within an exercising unit.

Range targeting is the operation by which moving silhouettes and their computerized and/or mechanical remote control systems are permanently installed at the range. These silhouettes, to be differently positioned and aligned,



The possibility of communicating and transmitting real-time data is undisputedly useful at operational level.

vary in number based on the potentialities of each range and are employed to simulate possible enemy movements and fire actions.

The Control Station is the terminal responsible for exercise data collection and analysis. Sequences selected by analysts (graphical displays, recorded radio communications and video clips shot in the field) are processed by personnel specialized in multimedia technologies and integrated into packets which may include written texts as well.

The subsequent after action review, the final and most important phase of all training activities, takes place in class under the direction of O/Cs or other specially appointed Officers or, in large ranges only, is performed on board fully equipped trucks connected to the Control Station through fiber optic cables.

The capability of reviewing and commenting upon major mistakes on the spur of the moment is very important, especially during the most sensitive phases of an engagement. Thus, players may evaluate the reasons for their mistakes and immediately draw the related lessons.

The O/C/Fire Marker Group is the 4th pillar of our Combat Training

Centre. It acts as the Control Station's "eye and arm" over the range, being tasked with monitoring and reporting all events, pointing out and solving problems - attempts at tampering the outcome of fire action as well - advising parties on how to comply with the rules, communicating them any requests from the Control Station and cooperating in the implementation of safety measures (employment of pyrotechnics).

As a general rule, the lower the number of O/Cs, the higher the quality level of the instrumentation employed.

As regards fully instrumented ranges, at least one O/C Group Leader and one O/C for each company/platoon commander are

required. Logistic/administrative infrastructure and resources can be divided into two categories. The first comprises the installations and structures necessary to support daily requirements (quarters for officers/NCOs and troops, messes, infirmaries, recreational facilities, schools, light and water supply, relations with the civilian population, territorial obligations etc).

The second category includes the resources necessary to provide specific support to the Combat Training Centre, at training-operational level.

FINANCIAL COMMITMENTS AND TIMELINE

The total costs forecast for setting up 2 Simulation Centres and 2 Combat Training Centres amount to about 110 billion lire and include all necessary infrastructure (Control Stations, buildings, washing facilities, one-family or two-family houses, sports installations, out patients' departments, green areas etc).

These facilities are not only preliminary requirements, but a pre-requisite to keep up the high-



A 129 "Mangusta" attack helicopter armed with anti-tank missiles.



The operational effectiveness of soldiers is achieved also through their physical preparation.

quality standard of the centres. Besides the structures necessary to operate the range, a satisfying quality of life is also required, which is no longer optional but an absolute must.

Annual maintenance costs, estimated at about 10% of the total sum, i.e. 11 billion lire per year, should also be taken into account and added to the initial building expenses.

In particular, battle simulators and their technical components, simulation centres (non infrastructural sections) should be permanently serviced by civil technicians supplied by the contractor.

In fact, maintenance activities cannot be carried out through our standard national logistic chain.

As regards the timeline, a 10 year period has initially been forecast, considering that a step-by-step approach may be adopted to develop Combat Training Centres, and the acquisition of a reduced-scale system, called GAMER, has been scheduled, to fill the gap before the project is completely developed.

This timeline may also be shortened, taking into account that infrastructure works must sometimes comply with fixed

technical deadlines, which cannot be anticipated.

CONCLUSIONS

Upon the completion of this project, the Italian Army will make a quantum leap and rank next to other European armies. As a consequence, a new way of conceiving military structures will

gain ground, which will no longer be looked upon as working grounds only, but as living places as well. Capo Teulada, in particular, which I think is already a natural heaven, may become a unique high-quality Centre, both for its training level and life and working standards.

Once this structure is enhanced and the shift to professional army completed, the local population may also benefit from increased job opportunities, together with other benefits, such as the employment of welfare resources, already existing (beaches) or under construction (sports installations). This will put an end to the hard feelings underlying the relations between the local community and the military administration.



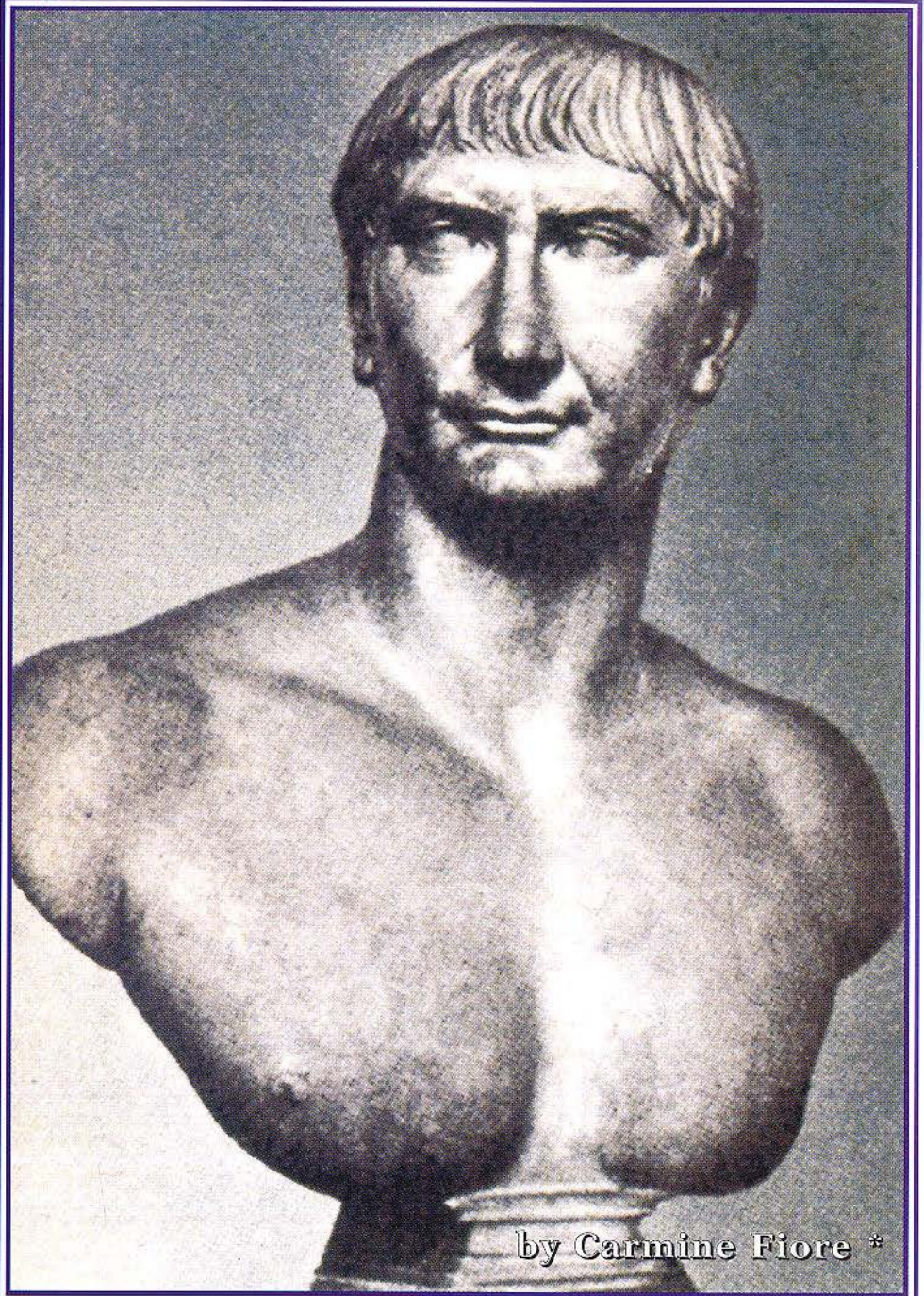
** Major General
Deputy Commander, ARRC*



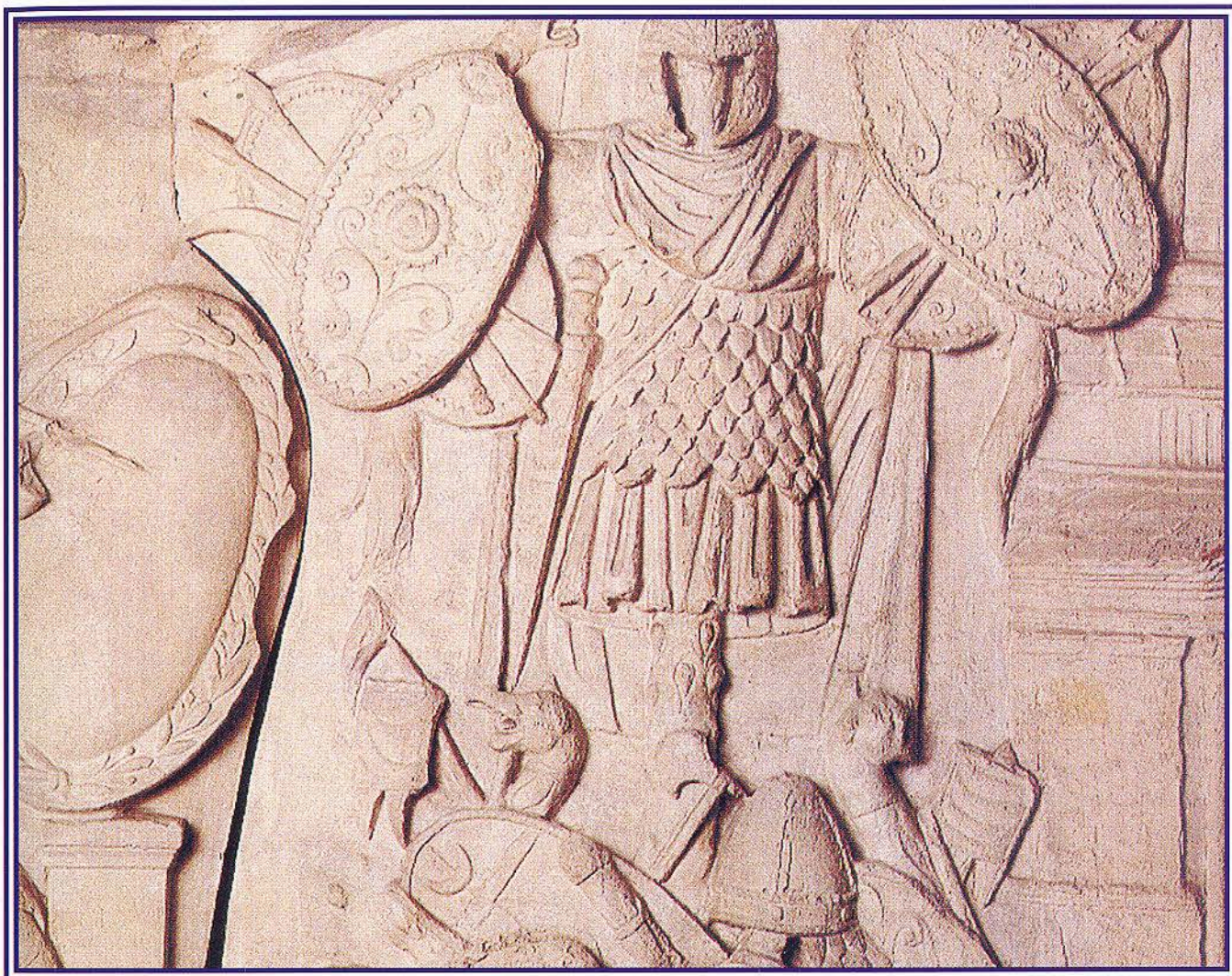
Paratroopers on combat training in a built-up area.

ROMAN EMPERORS MARCUS ULPIUS TRAJAN

Optimus princeps,
Trajan was an
absolute sovereign,
capable of using
power without
abusing it.
It is not by chance
tha he is remembered
as the greatest of
Emperors.



by Carmine Fiore *



Soldier and administrator, strong and just man: these are the outstanding characters of Trajan, the great Emperor. With him the Empire acquired its highest splendour and under his guidance Rome reached its maximum extension.

He governed Rome for twenty years, but for a decade he was abroad, engaged in wars of defence and expansion. Two years after his election, and for the first time in Roman history, the Senate had conferred him the appellation of *Optimus*, "the best", but he forbade its inclusion among the official titles for about fifteen years.

He was born on the 18th of September of the year 53 A.D. in Italica, a small Spanish town, near today's Seville, founded by Scipio Africanus. His father had been

Senator, Consul and then Proconsul of Asia. His mother was Spanish.

His private life was marked by his choice to be a soldier. As a matter of fact, his service as "*tribunus militum*" lasted very long. He went through every stage of the customary career (*quaestor*, *praetor*, *legatus*) and was thus able to know the frontiers and the life conditions of an officer, spending a lot of his time abroad.

Trajan became Consul in 91 and was sent to Germany as Governor in 96. In 97, when Emperor Nerva associated him to power, appointing him as his heir, he was still commanding the troops stationed in upper Germany. He was no relative of Nerva's, who designated him only because he considered him "the best".

Nerva died three months later

without seeing his adoptive son again.

The news of his election reached Trajan at Cologne, after a competition of messengers that was won by P. Aelius Hadrian, his cousin and successor.

Trajan became Emperor on the 27th of January of 98, aged 45. He was the first Emperor born outside Italy. Thus the Roman rule revealed its supernatural character.

On being appointed Emperor he did not return immediately to Rome preferring to remain in the region of the Rhine and the Danube to stop the leaks that had occurred on the borders of the Empire.

He made his entry in Rome two years later, not carried on a litter, like an oriental king, but walking like any ordinary citizen. (He was very tall, anyway, and stood above everybody).

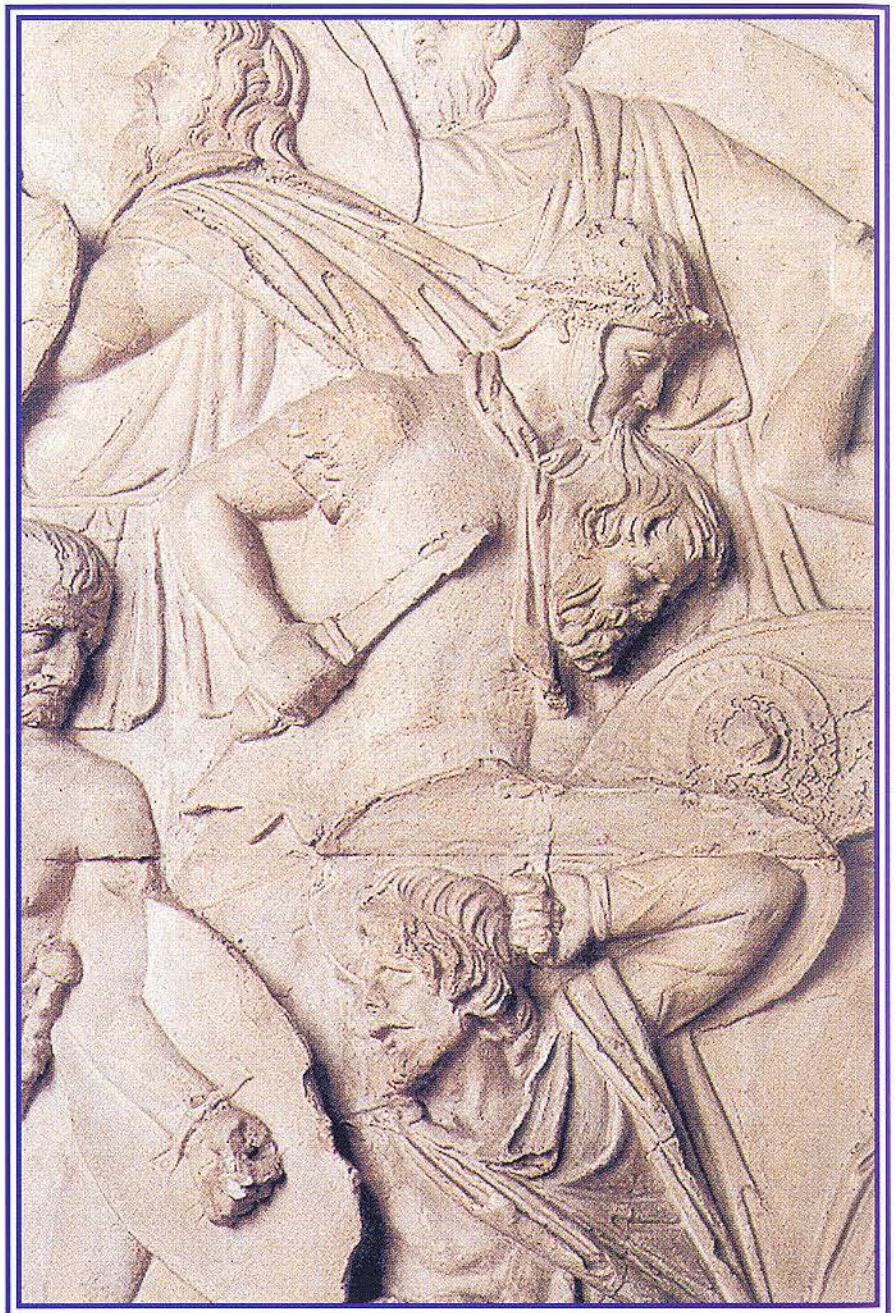
A legionary fights while holding the head of a Barbarian with his teeth. (Trajan's Column).

He chose a palace of modest size, living as an upright man.

When at last he went to the Senate to be invested, Pliny addressed him with a long panegyric (it lasted several hours) in which, among other things, he asked a greater involvement of the Senate in the administration of public affairs. Trajan agreed to this request willingly, calling many Senators to govern the Roman dominions. Nevertheless, he controlled them very closely, attending in detail to the needs of the various Provinces, for instance granting personally the permits to build edifices for public use. This control allowed him to catch several Senators who had illegally amassed a considerable wealth also by taking advantage of the lenient policy of the previous Emperor, Nerva. There were several trials for cases of misgovernment of the provinces, even if the Senate generally passed obliging sentences.

Along the years, Trajan deprived the Senate of some of its authority by constituting a *Consilium Principis*, a collegiate judging body made up by well-known jurists.

Trajan had a sense of moral rectitude that made him an excellent administrator of the State. He always acknowledged the supremacy of the law, even when it challenged the Emperor's will. Power never went to his head and he considered the Emperor's role above all a service. He immediately abolished the honorific rituals connected with regality: the swaying palanquin with its outriders, the embrace of the Emperor's foot, the kiss on the hand and all the degrading symbols characteristic of an oriental monarchy. With his heart's openness and simplicity of manners he gained the affection of the most influential classes of the State: the soldiers and the Senate. Trajan was an extraordinary worker; his political ideas were those of an enlightened conservative who believed more in



good administration than in great reforms.

AN OFFENSIVE FOREIGN AND MILITARY POLICY

Even if, according to the historians, Trajan's greatest merit towards Rome derives from his administrative activity, his centuries-old fame is mainly due to his military enterprises.

He excluded violence but knew how to employ force. A clever

strategist, wise administrator, just man, soldier with a soldier's mentality, he believed that attack was the best defence.

In fact, in foreign policy, renouncing the defensive line followed by his predecessors, Trajan organized new wars of conquest; he needed new territories to support his home policy of assistance to the poor and to solve the economic crisis which grew irreversibly, together with a very high level of taxation. Moreover, the new territories would ensure a

Group of Oriental archers, members of a Roman auxiliary unit. (Trajan's Column).

great supply of slaves and the possibility to place Italic settlers in the regions conquered.

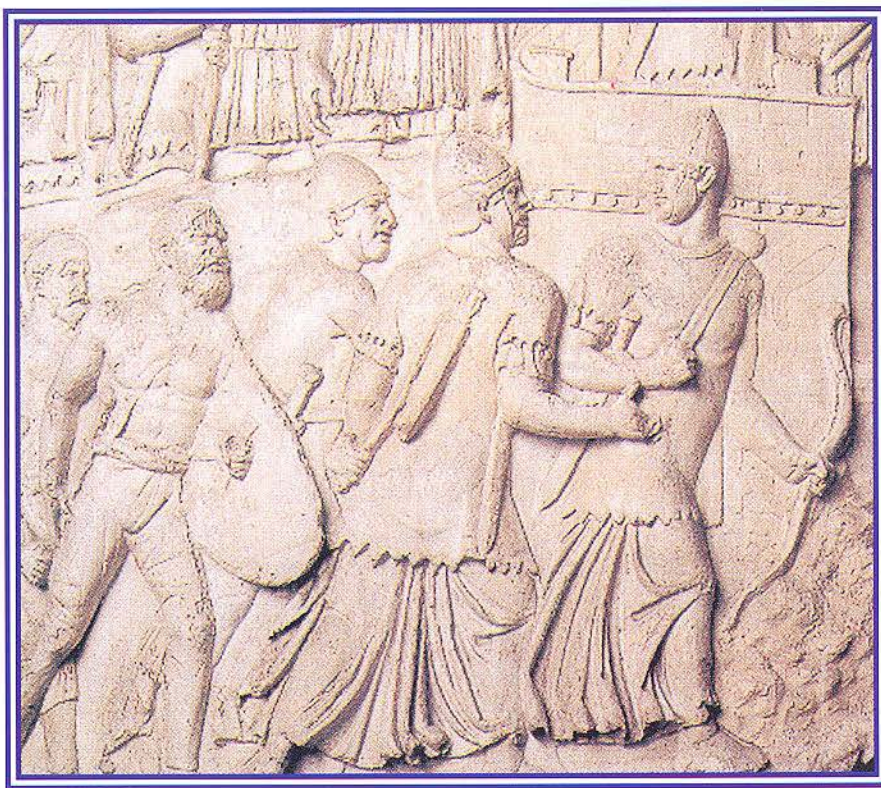
For this purpose he needed a reliable army, and this was his first concern. He created new legions but, above all, imposed a new sense of discipline, with an intense training programme and a new relationship among soldiers, Commanders and Emperor. Trajan firmly believed in the value of example. He shared the toils and anxieties of his soldiers, with whom he familiarized by calling them by name, scolding them if necessary. His ascendancy over the soldiers won him a devotion, loyalty and respect which increased day by day. A fact is certain: the mutual loyalty between the Army and Trajan was absolute and perhaps no other Emperor knew how to obtain similar fruitful results from his soldiers.

Trajan's principal wars were the Dacian and the Armenian-Parthian wars and, moreover, one should also remember the conquest of Northwest Arabia.

THE CONQUEST OF DACIA (101 - 106)

During the months spent on the German front after his election, Trajan had time to elaborate a foreign policy whose fundamental aim was to tackle the problem of Dacia (today's Rumania). The possession of this region, in fact, permitted to achieve a stable defensive line against the barbarian infiltrations towards the west. Furthermore this would permit a peaceful development of the adjoining Roman regions of Mesia (today's Bulgaria) and Thrace (Eastern Greece).

Dacia had been a problem for the Romans also in the previous years. It was an always dangerous neighbour, a beacon for the union of all the peoples of the middle and



lower Danube. In 85-86, Domitian had thought of settling the difficult situation with sums of money, given as subsidies to obtain the cooperation of the most civilized tribes or the neutrality of the most riotous ones along the borders. This choice seemed incomprehensible and disgraceful to his contemporaries. Domitian's policy represented the wisest provisional expedient but could not be considered a definitive solution. It could be successful only when the beneficiaries were too weak or divided to be a threat for the neighbouring Roman provinces. The Dacians, on the contrary, were a united people, well organized and aware of their nationality, under the orders of an ingenious prince, Decebalus, who nourished an unquenchable hate against the Empire and who tried to involve the neighbouring tribes as well as the distant Parthians (Far East) in a common war against the Romans.

Besides the security of the borders, also other eminently practical reasons made the conquest of Dacia most profitable: the gold mines and the possibility of

obtaining a large number of slaves. With gold, Trajan could build public works through a good part of the Empire.

The conquest of Dacia was accomplished with two wars:

- the first, from 101 to 102;
- the second, from 105 to 106.

The first Dacian war was started in March 101 by Trajan himself, who feared an invasion of Mesia, a Roman region bordering with Dacia, by Decebalus, who could take advantage of the frozen Danube. Decebalus was at the peak of his prestige and Trajan estimated that a postponement of the enterprise would make its success more difficult.

As a matter of fact, already in 98-99, Trajan had made a series of tactical preparations, among which the construction of a new road that could be used for the advance.

Trajan had two great bridges thrown on the Danube, which was crossed by two columns of eighty-thousand legionaries. The two columns reunited at Tibiscum and proceeded to Tapae and the pass of the so-called Iron Gates, which



Auxiliary troops, probably belonging to a German "numerus". (Trajan's Column).

Sarmizegetusa, was close at hand. But an action directed towards the capital would have exposed the Roman left flank to the offences coming from a line of Dacian strongholds built on the mountains' spurs. Trajan, once more, changed the gravitation centre of his effort and directed his main column against the strongholds, which were destroyed one by one. In this way he realized the principles of mass and that of the division of the adversary.

Decebalus employed all his forces to succor the fortresses and, when the last was stormed, the road to the capital could be considered open and the war won. Decebalus, in order to spare the horrors of a useless siege, capitulated and presented himself to Trajan's camp.

Peace was achieved in 102 and granted in rather mild terms.

Decebalus, in fact, could keep the Thracian mountains with their gold mines. There are various reasons that may have suggested this clemency to Trajan:

- an excessive confidence in the importance of the success obtained;
- the difficulty of maintaining in Dacia, through the whole winter, an army for the conquest of the entire region;
- the acknowledgment of Decebalus' personal valour and the consideration that he could become a faithful ally of Rome.

Nevertheless, both leaders cultivated the mental reservation of better preparing themselves for a possible new war. In fact, Trajan did not remove from the area any of the Legions that had participated in the campaign.

After some years, in the autumn of 105, Decebalus started the action by invading Mesia, initially taking the Romans by surprise. That was the beginning of the

admitted to Dacia itself. (The use of separate columns, in order to penetrate into a difficult region and divide the enemy on the strategic points, is a tactical device that Trajan adopted also afterwards against the Parthians).

Decebalus withdrew, trying to drag the Romans to impervious zones, lengthen their communication lines and isolate them among the mountains of Transylvania. But during the advance, Trajan was building bases and strongholds (Lederata, Tibiscum) in order to consolidate his conquests and make possible the inflow of reinforcements and supplies. In his tactical vision of the situation, in fact, an outstanding issue was that regarding the logistic problems.

The first field battle of the war took place at Tapae, in 102, and ended with an undecisive victory of the Romans. An altar, dedicated to the many fallen Romans, was erected on the place. Having been made aware of the intrinsic force of the defences of the Iron Gates, in the following spring Trajan changed the gravitation line of his effort and penetrated into Dacia through the Red Tower pass, even if, through this road, the communications line was much longer and weaker. With this manoeuvre he achieved surprise, so much so that the pass was taken before it could be blocked by a Dacian contingent. By now, Trajan was at the centre of the Carpathian ring. The main objective of the effort, the Dacian capital

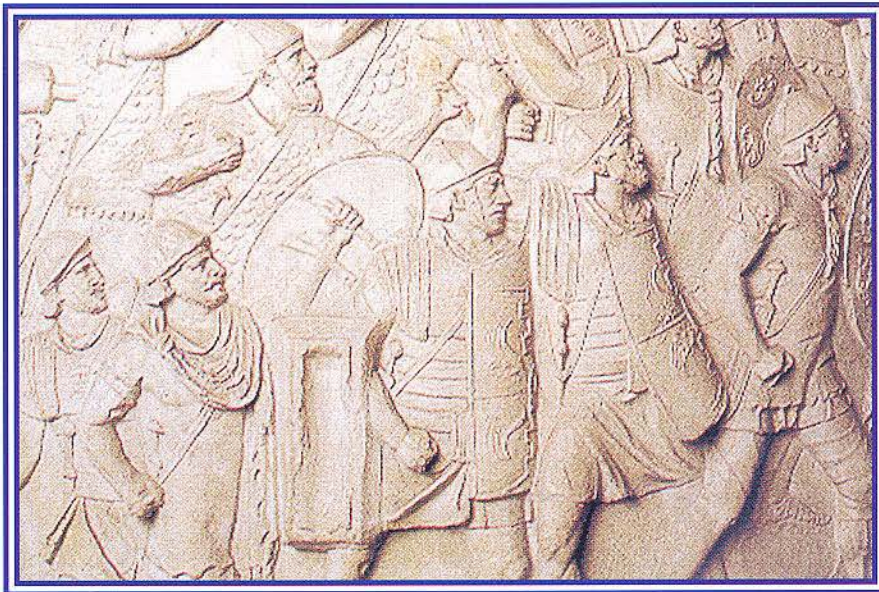
second Dacian war.

Despite the prospects of the oncoming winter and the adverse conditions of the sea, Trajan sailed from Ancona with a considerable fleet and reached Zara. He also took with him his cousin Hadrian (his future successor). He followed an advance line different from that of the first Dacian war. Probably he crossed Dalmatia and advanced at great operational speed. He was decided to hit even before the arrival of the reinforcements, also in order to avoid the propagation of the revolt among other tribes. This time, he wanted to conquer the entire region of Dacia. Having gathered the forces, he crossed the Danube on the great stone bridge which the architect Apollodoros of Damascus had built at Drobeta during the short period of peace.

The attack was conducted from two directions, that of the Iron Gates and that of the Red Tower. Once these positions were overcome, the offensive was directed towards the capital Sarmizegetusa, which was occupied after a desperate resistance. Nevertheless, the conquest of the capital did not conclude the war. Trajan was well aware that the Dacian problem would be solved only with Decebalus' death. The latter, in fact, had tried to withdraw towards the north in order to reorganize his forces and to call other tribes to the revolt. But the Romans' hunt was ruthless. Decebalus took flight, but, chased and reached by the Roman cavalry, to avoid being taken prisoner killed himself. The Romans cut his head off and sent it to Rome as a trophy.

Since then, the capital Sarmizegetusa has been called Ulpia Trajana.

In order to give a definite organization to his conquests, this time Trajan took very severe security measures conforming to the motto: "on the Dacian plateaus the prerequisite for peace is devastation". At least fifty-thousand prisoners were sent to Rome as slaves or to conclude their life as gladiators.



Dacia became a Province and a polyglot population replaced the native people. Among the former, there were a great number of Roman settlers who were thus starting a radical Latinization of the region, the effects of which are still felt at the present time. The lush pastures were leased and expert officials attended to the gold mines of the Thracian mountains, while other technicians dug in quest for silver, iron and salt. Some parts of Dacia were annexed to Mesia.

The objective of making the Danubian borders more secure had been achieved. The military organization conceived by Trajan ensured them peace and in his civilizing policy there were the germs of the future force of those populations.

Trajan saw with extreme clarity that in the Danubian provinces there was the key of the Empire's prosperity and security. Much attention had to be devoted to them because they formed the backbone of the most sensitive frontier.

History was to prove him right: Rome fell in consequence of the barbarian invasion coming from the Danubian frontier!

In this, his vision was right. If he had been satisfied with his Danubian laurels he could have prided himself of having rendered Rome an excellent service.

Oriental archers. (Trajan's Column).

Unfortunately, a wrong evaluation of his successes made him turn his attention to the East and his fruitless Parthian campaign imperiled the stability obtained through so many hardships.

THE CONQUEST OF NORTHWEST ARABIA (NABATAEA)

Almost at the same time as the Dacian war, in 106, Rome concluded the conquest of the kingdom of the Nabataeans (Northwest Arabia).

In 101, King Agrippa II had died with no direct successor and Rome had annexed that kingdom to the new province of Judaea. Thus it had acquired a thin strip of land that permitted to link Judaea with Egypt (already a Roman colony), but the continuity thus reached appeared too slender. In order to give it depth and solidity, the best solution was to acquire the vassal kingdom of the Nabataeans (corresponding to today's Jordan), which Trajan conquered in 106 with relative facility. By now, all the Mediterranean shores were in Roman hands and the Mediterranean sea had really become "Mare

Nostrum" (our sea). Moreover, the territories of Nabataea and Judaea could be used as platforms for launching future operations towards the East.

THE EASTERN FRONT (THE ARMENIAN-PARTHIAN WAR)

Being a good strategist, Trajan had fought the war for the conquest of Dacia after ensuring a period of relative tranquillity on the eastern frontier (today's Middle East). In accordance with these strategic preparations, he had been able to achieve the conquest of Dacia, after as many as four years.

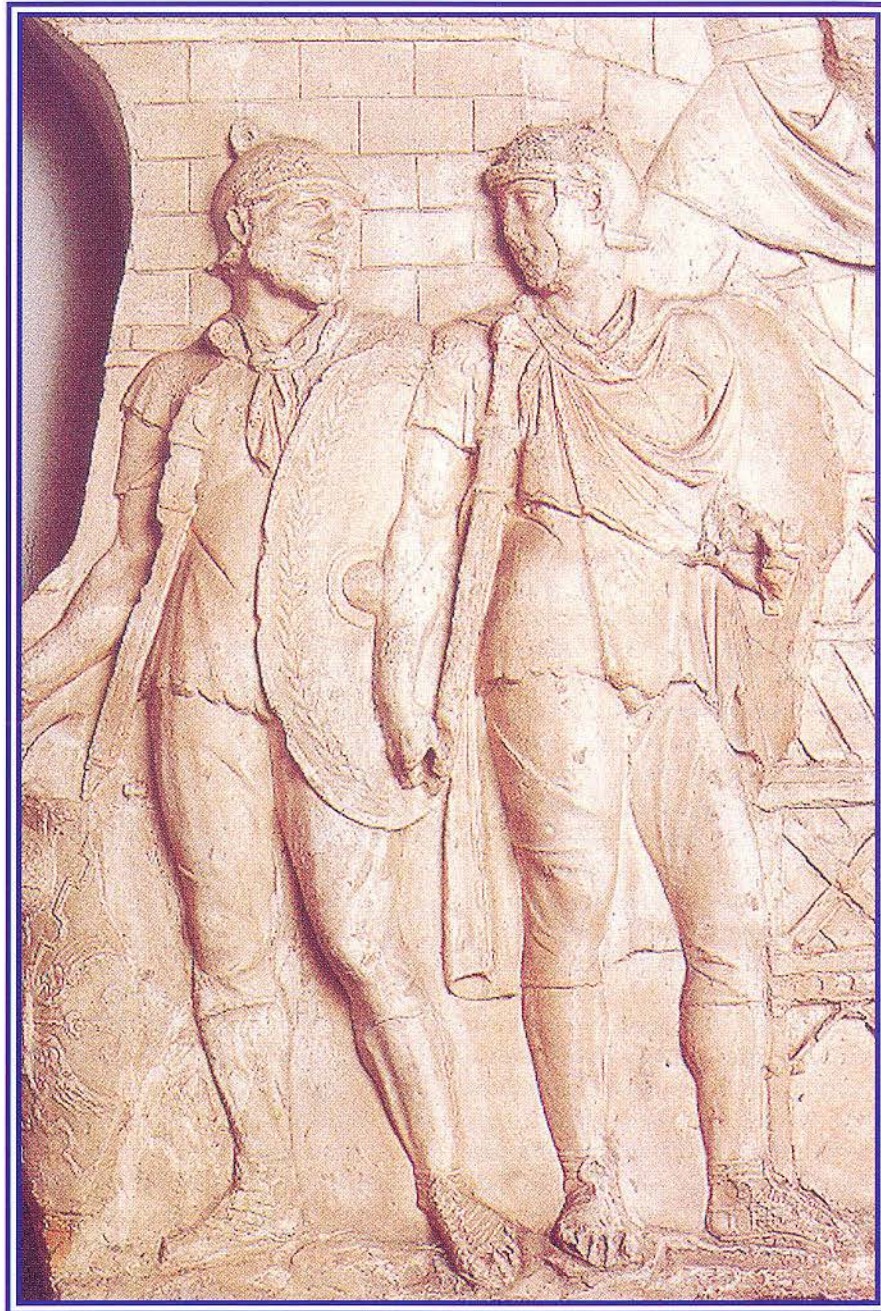
A triumph of this importance could last for a generation; to attempt another war, on a vaster scale, after less than a decade, represented an onerous expense for the imperial resources. Trajan lacked this geostrategic vision of the situation and started to turn his attention to the eastern front.

This was the fatal attraction of the great leader! Having conquered Nabataea (Northwest Arabia), everything seemed propitious for starting the war against the Parthians, realizing the dream of every Roman commander: to win the Parthians and lead the legionaries to the shores of the Persian Gulf.

For this enterprise, Trajan had made some tactical arrangements by:

- paving the roads to facilitate communications and supplies;
- digging wells and cisterns so that his army should not lack water;
- building the important road that connects Damascus with Aqaba, on the Red Sea;
- building secondary connecting roads;
- strengthening some strategically decisive points for protecting the communication lines.

With Armenia and the Parthians the Romans had had various, mostly unsolved, controversies. Armenia and the Parthian kingdom had

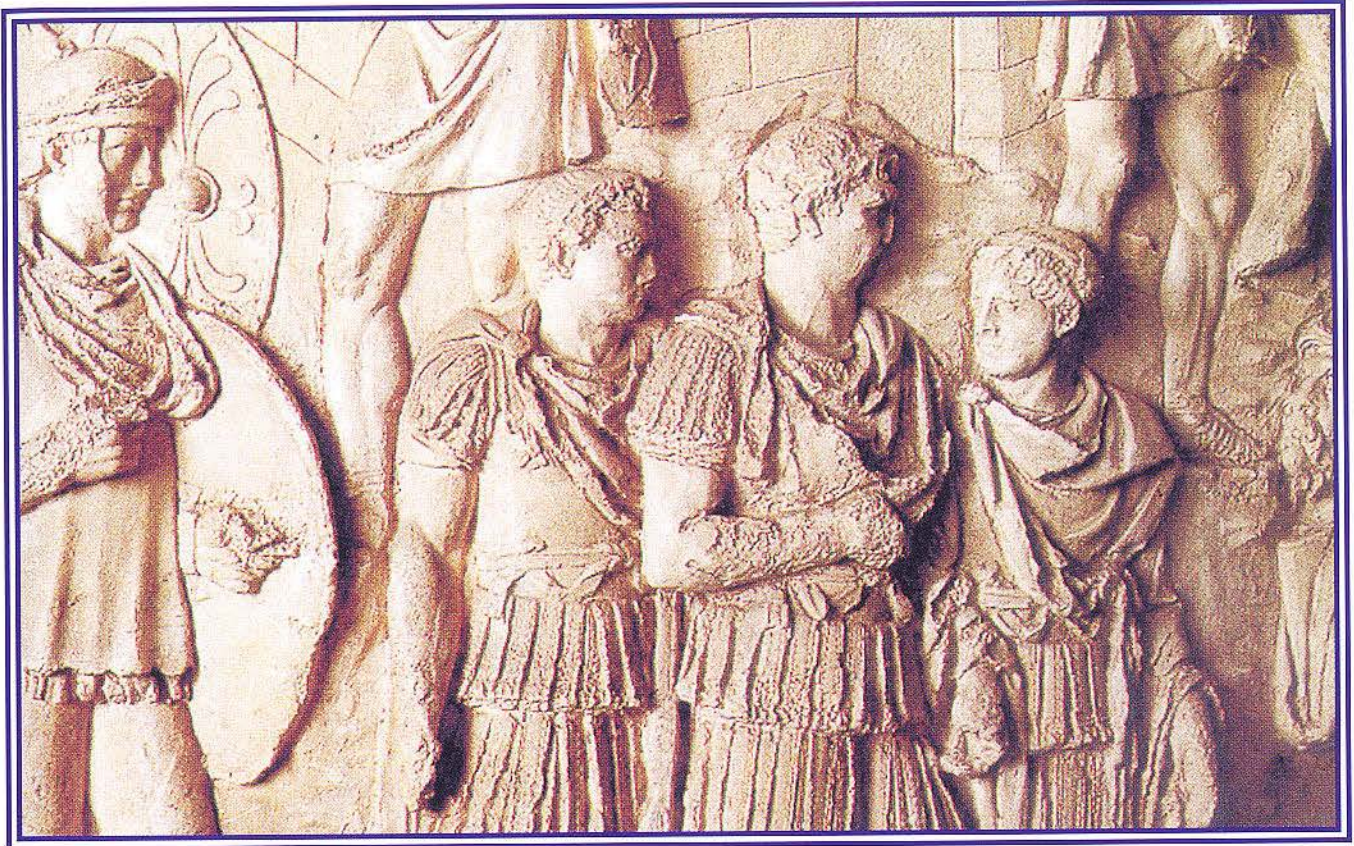


always been a thorn in Rome's side, already since Pompey's and Augustus' times. Trajan himself had experienced the "fierceness and pride" of the Parthians when he was a young tribune under the orders of his father. He thought of solving the problem once and for all, consolidating Augustus' imperial design and leaving to his successors a unified, respected and secure State. He was also incited to do this by the memory of Alexander the Great and by the wish to avenge the defeats suffered by Crassus and Antonius.

The pretext for the war was given, in 110, by the new King of the Parthians, Osroes, who, having succeeded his brother Pacoro II, immediately manifested his hostile attitudes towards-Rome.

In particular, Osroes deposed the Armenian King, Axidares, and installed his nephew Parthamasis, without asking Rome's permission, contrary to the peace accords stipulated with Nero in the preceding years.

Trajan seized the opportunity: he had not wanted war but had been



Above.
Interior of a tent in a Roman camp.
(Trajan's Column).

Facing page.
Soldiers on sentry duty. (Trajan's Column).

preparing himself for it and there is no reason to doubt that he welcomed the circumstance, in order to clarify, once and for all, the never settled Armenian question. This was demanded of him also by the fact that he was the Emperor who, after the conquest of Dacia, had given back to Rome the sense of its imperial mission.

The conflict started in 113. Trajan occupied Armenia and declared it a Roman province, although King Parthamisir had laid his crown at his feet, hoping that it would be put on his head again. During the winter of the years 114-115, Mesopotamia was conquered and became a Roman province. The campaign had achieved a success that surpassed all forecasts and had given not one but two provinces to the Empire

(Armenia and Mesopotamia). Instead of stopping, Trajan prepared another campaign for the following year. During the winter, the local forests were widely cleared of trees for the construction of the boats and pontoons necessary to cross the rivers. This confirms the "engineering" capability which has enabled the Romans to accomplish so many great enterprises.

The surmised conquest of Ctesiphons (near today's Baghdad) posed a remarkable logistic problem: the Roman troops had to abandon the rather fertile lands of Mesopotamia to advance into the desert.

The problem was solved by making use of the river routes of the Euphrates and Tigris. Ships of considerable tonnage were built, which were capable of sailing along the Tigris starting from the Syrian border, thus creating a sufficient line of communications and movable supplying bases.

In the spring of 116, Trajan started for the conquest of Babylon and Assyria, operating with two columns

along the direction of the two rivers.

The main effort was along the Tigris and he assumed personally the command of this column. The transit on the river was rudely resisted but, by deceiving the enemy with numerous feints and by covering the engineers with a barrage of infantry and bowmen stationed on ships anchored along the river stream, it was possible to build a pontoon bridge and allow the troops to transit on it.

The column that operated along the Euphrates advanced into the region of Babylon and rejoined the main one, with the intent of besieging the capital of the Parthian kingdom, Ctesiphons. The large ships used by this column on the Euphrates were transferred through the desert up to the Tigris since they were very useful for the siege of Ctesiphons. The capital of the Parthian kingdom did not resist the siege for a long time.

The war seemed to have come to an end, even if Osroë had managed to get away.

To pursue Osroë on the Iranian

Victory writing on a shield. (Trajan's Column).

did not hold for a long time because there were new disorders in the conquered lands.

Age (the Emperor was well in his sixties), weariness, health, undermined by hardships and efforts (he suffered from dropsy), the need to control a new Jewish revolt in Cyrenaica, kept him from starting a new war against the Parthians. He entrusted the Army to his cousin Hadrian, appointing him *Legatus* of Syria, and started his return journey to Rome. He regretted being too old to sail and set out for the conquest of India and the Far East, realizing the dream of Alexander the Great. Indeed his destiny prevented him even from seeing Rome again!

THE JEWISH REVOLT

Trajan was not a persecutor of Hebraism. But the Jews did not love Rome. They had a bitter memory of the loss of Jerusalem and the destruction of Solomon's temple. In 114, to wage war against the Parthians, Trajan had reduced the garrisons in many eastern provinces. The Jews believed that the moment had come to start the attack. The revolt began in 115, in Cyrenaica, the Roman province with less garrisons, and expanded rapidly to Egypt, Cyprus and Mesopotamia.

The repression was horrible. The Generals sent to Egypt perpetrated a real slaughter. The same occurred in the other regions.

The surviving Jews fled, taking refuge in the internal zones of Africa.

THE PUBLIC WORKS

Despite his praised modesty and his pragmatic character, Trajan knew very well that the celebratory monuments, and especially public works, were necessary to increase



plateaus was a hard undertaking and now it was necessary to organize the life and administration of the new provinces.

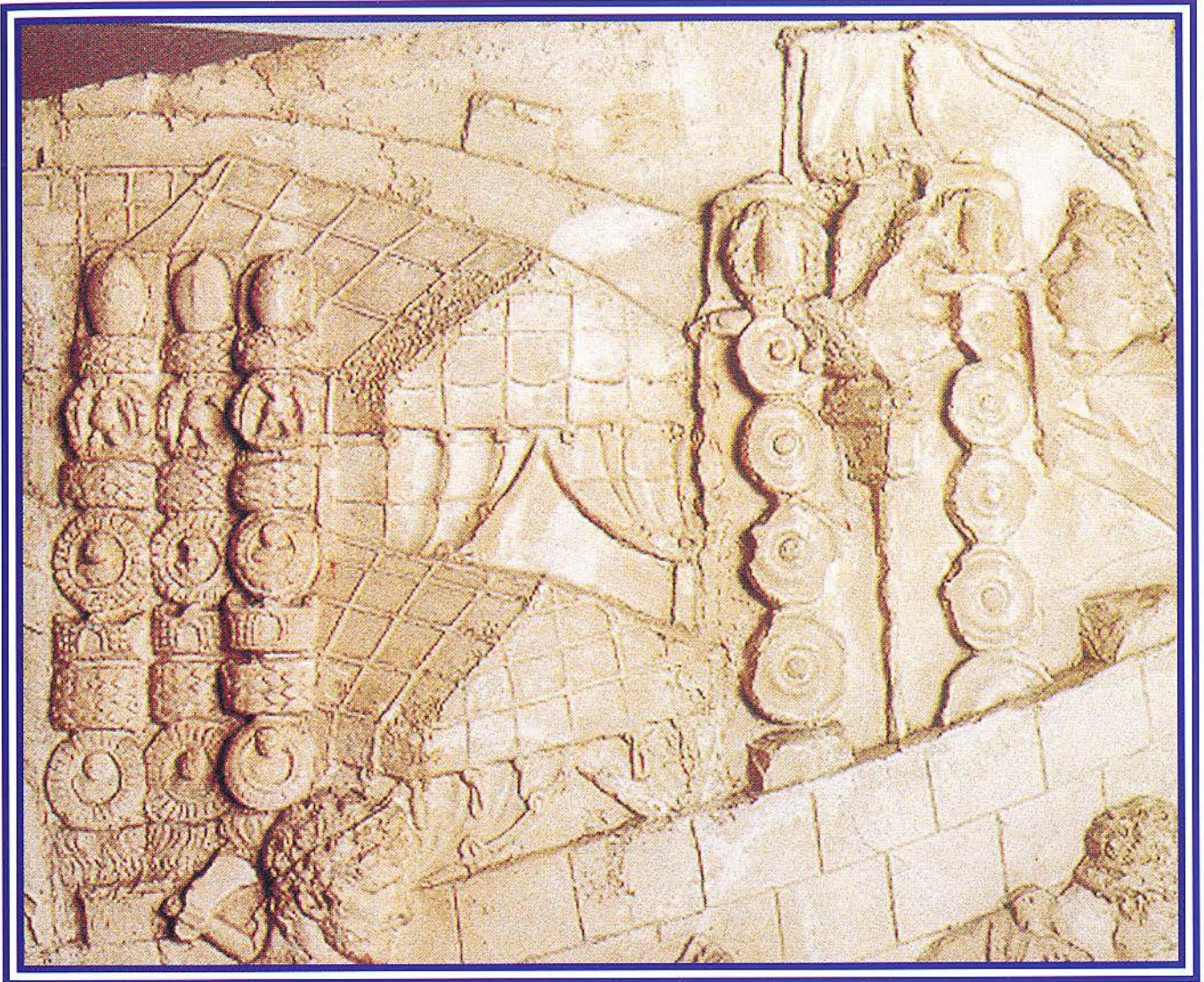
Before proceeding to the definitive settlement, Trajan made another advance. In the winter of 115-116 he went down as far as the mouth of the Tigris. Rome had reached the Persian Gulf, taking possession of the commercial route from Mesopotamia to the Far East.

But the spirit of the Parthians was not completely subjugated. With their swift teams of bowmen on horseback they developed an intense guerrilla against the

Romans. This time the Emperor realized that, having to deal with immense territories and with populations of indomitable character, it was impossible for Rome to exercise an effective control on the situation. Therefore he decided to put everything at stake with a bold political action:

- he crowned one of the most dangerous rebel chieftains as vassal-king of Rome;
- he designated to the throne of Armenia the son of one of the most dangerous chiefs.

His political design, nevertheless,



the people's consent.

As regards public works, his main accomplishments were:

- expansion and maintenance of the road network, concerning every region of the Empire;
- organization and enlargement of ports, in order to facilitate ship docking (Sicily, Civitavecchia, Ostia, Ancona, etc.);
- foundation of colonies;
- construction of bridges (the famous ones on the Tagus river, near Alcantara, and that on the Danube at Drobetae. The latter was 1100 metres long, 27 metres high and 12 metres wide. An absolutely extraordinary undertaking for those times);
- construction of aqueducts in Italy (as the one that from the lake of Bracciano brought water

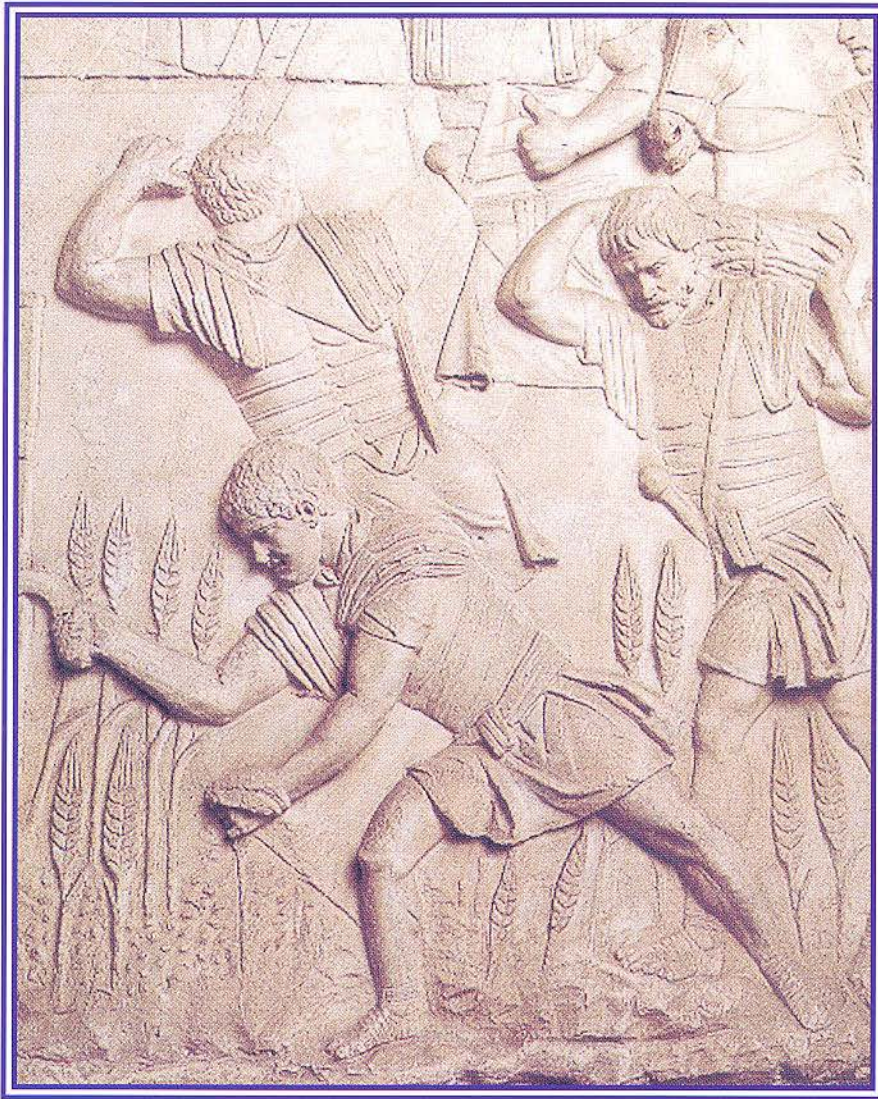
to Trastevere in Rome), Spain, Dalmatia, Arabia, Egypt, etc);

- reconstruction of the Appian Way. In order to shorten the journey to Brindisi, he built an improvement route starting from Benevento. The new road was called Appia Trajana and can be considered the forerunner of our highways;
- attempt (not fully successful) to reclaim the Pontine marshes;
- thermae on the Colle Oppio;
- construction of an area for the naumachia (simulation of a naval battle) on the right bank of the Tiber, near today's Castel S. Angelo;
- restoration and amplification of the Circus Maximus;
- rebuilding of the *cunicoli* of the Roman *cloacae*;
- reinforcement of the Tiber

Units' insignia at a camp. (Trajan's Column).

embankments, in order to prevent floods, and construction of a new canal to make the water flow away.

As regards his principal monuments, Trajan availed himself of the great architect Apollodoros of Damascus. Trajan's Forum, the greatest and most splendid imperial forum, was his work. It is as big as all the other imperial fora put together and is one of the most majestic monuments of all times, enclosed in a group of buildings of extraordinary magnificence at whose entrance stood a triumphal



*Legionaries intent on harvesting.
(Trajan's Column).*

marble arch. Next to Trajan's Forum there were Trajan's Markets, similar to a modern commercial centre, with about 150 shops (although there were no refrigerators, there was also a market where fish were kept alive in tanks of fresh or sea water, according to the type of fish).

Trajan's Column was placed inside the architectural complex. The column was built to remember the conquest of Dacia and stood 30 metres high, 4 metres wide and was crowned by a statue of the Emperor. It was originally coloured and hides inside a spiral staircase of 185 steps. A marble frieze winds

around the column for 23 turns. The frieze is 1 metre high, has a length of 200 metres and bears 2500 figures that narrate the events of the conquest of Dacia (it can be considered the forerunner of the modern TV serials). The engraving is too crowded to be defined beautiful, but as a documentary is very interesting. Complying with the express wish of the Emperor, on the sides of Trajan's column two libraries were built, one for Latin and one for Greek books.

SOCIAL, FINANCIAL AND POLITICAL WORKS

In order to maintain prosperity in Italy and enable it to keep its supremacy within the Empire,

decidedly more drastic measures were necessary other than the mere improvement of the lines of communication.. Therefore, the principal characteristic of the initiatives promoted by Trajan in the social field was a concern for the new generations.

On the *plutei*, that are now kept inside the Curia (seat of the Senate, in the area of the Roman Forum) one can see Trajan who burns the tax registers and establishes the *institutio alimentaria*. This institution had been introduced by his predecessor, Nerva, but was fully realized under Trajan.

Thanks to the money coming from the conquest of Dacia, Trajan repopulated Italy with free farmers, supplying them with land, seeds, implements and houses, asking in exchange a moderate annual interest. He thus improved the conditions of agriculture.

With the interests, he instituted colleges for poor girls and boys and for the orphans of his legionaries, who received monthly subsidies (16 sesterces for the boys and 12 for the girls). In this way, by guaranteeing them food and instruction, he secured for the Empire a class of technicians and military which were going to form the framework of the successive reigns of Hadrian and Antoninus.

Among Trajan's initiatives to foster Italy's economic recovery, one should be mentioned in particular: the introduction of the obligation, for the senatorial class, to have at least one third of their capital invested in Italy. Moreover some Italian cities were repopulated with groups of veterans and the emigration from Italy was subjected to limitations. Finally, the Italians and the provincials could benefit from the annulment of some taxes and the Romans enjoyed even greater concessions. The first category organizations, like those of the Roman bakers and carriers, were started at that time.

Trajan had inherited from Nerva, if not a deficit, at least the prospect of financial difficulties. The

A military physician assisting the wounded on the battlefield. (Trajan's Column).

situation was faced both by making economies and with the conquest of the gold and silver mines of Dacia. Despite the burdens connected with the wars in the East, it can be said that Trajan handed over to his successor, Hadrian, a prosperous Empire with a good financial outlook.

In the judicial field, the course of the trials was accelerated; confession was allowed, with the confiscation of one half of the illegal profits; anonymous accusations were forbidden; those sentenced in their absence had the right to a new trial; sentences could not be passed if there was the slightest shadow of doubt (*in dubio pro reo*).

HIS DEATH

In July of 117, during his return journey to Rome, at the end of the Parthian war, he had to stop in Cilicia for a thrombosis of the brain.

There he died on August 11, aged 64, having ruled for about twenty years.

For the Romans, it was fundamental that the dead be buried outside the *Pomoerium*, the sacred boundary of the city. Trajan's body was laid in a golden urn inside the basis of his column, at the heart of the city. Later, also Plotinia was buried next to him. She was his only wife, to whom he had been faithful for his whole life (an absolutely unusual thing at those times, when, by the higher classes, marriage was considered mainly in terms of political convenience or economic advantage).

Many times, the reasons of civilization and civilizing (today, in a broad sense, they would be called culture) have been celebrated in his person. The Romans affirmed that good Emperors "inhabited" virtues; and Trajan was a good Emperor! He



seemed to embody the reconciliation between princedom and "*libertas*".

Dante remembers him in the canto X of the Purgatory and celebrates his qualities of justice in some of his most beautiful verses. According to the Dantesque tradition, Gregorius Magnus, impressed by the Emperor's generosity, had obtained from God his resurrection for the time necessary to be baptized, thus permitting him to enter into Paradise in Jupiter's heaven and precisely among the six just spirits who form the eye of the mystic eagle. Thus Dante believed that the entrance into Paradise was due to the sense of justice which, at least in that case, could prevail over faith.

After him, every new Emperor was hailed by the Senate with the

words. "Be more beneficent than Augustus and more just than Trajan".

Under his inspired leadership, Rome recovered not only its internal security but also its imperial destiny. Nevertheless, the policy of conquest pursued by Trajan, at the end proved to be a "*damnosa hereditas*" for the Empire that he had tried to fortify.

In any case, a personality of that type was necessary to the Roman Empire precisely at the times of Trajan: a soldier and administrator, a strong and just man.

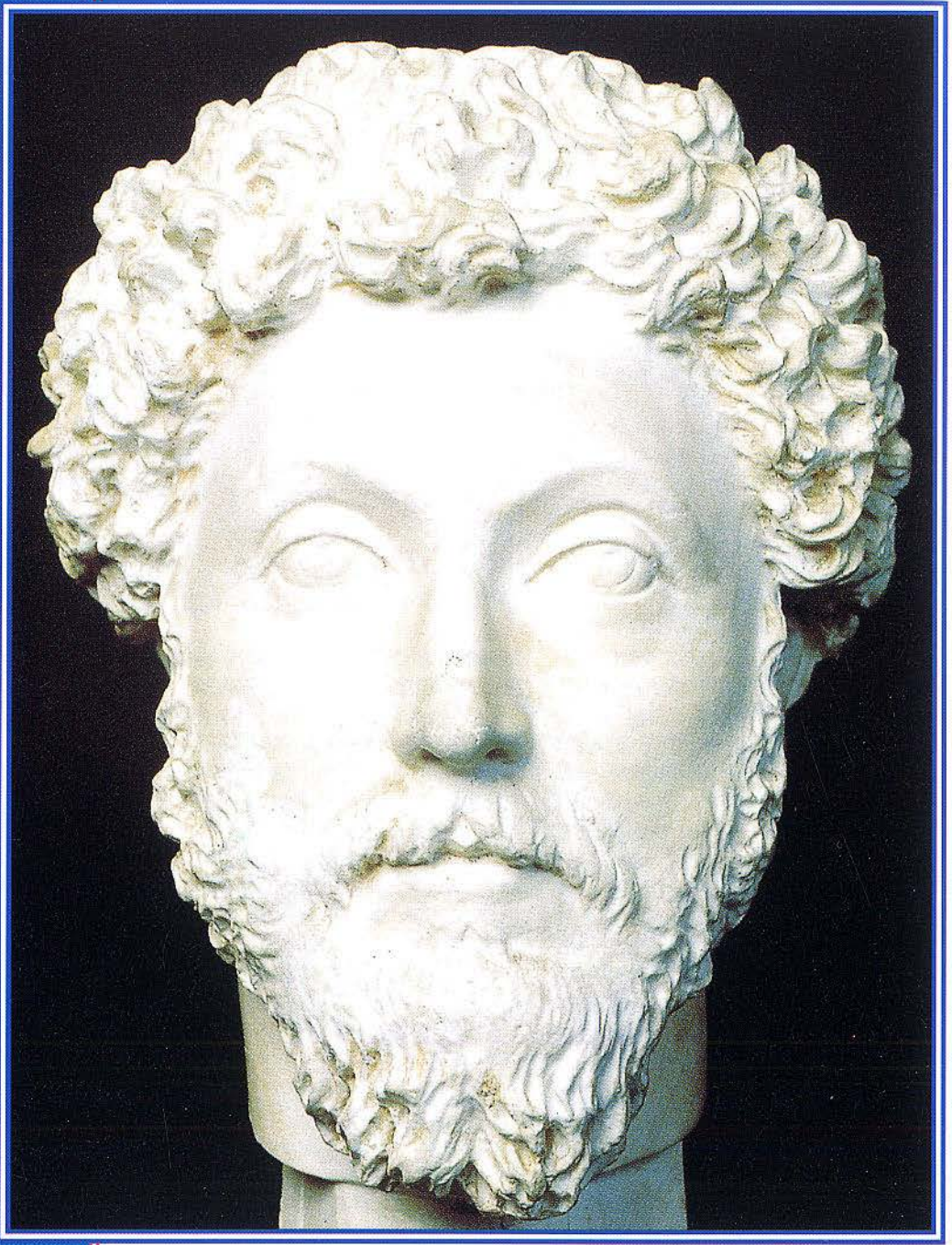
□

* Major General
Chief, 4th Division
DGS

ROMAN EMPERORS MARCUS AURELIUS

by Carmine
Fiore *

History remembers him more for his passion for Stoic philosophy than for his military deeds. Nevertheless, he was a leader that proved himself capable of an admirable strategic vision, reestablishing order and peace in the East and along the Danube, driving back the Barbarians who could have undermined the integrity of the Empire.



FROM TRAJAN TO MARCUS AURELIUS

In 117 A.D., after Trajan's death, Roman imperialism lost its offensive drive. Hadrian, his successor, in fact, considerably changed its expansionist policy realizing that the Empire was becoming too large for Rome. The emblem of a new defensive policy was the "Vallum Hadriani", a wall that divided Britannia in two. Hadrian was inspired by great cultural interests and was always "on the road", because during a great part of his 21 years of reign he visited all the provinces of the Empire. Antoninus, who succeeded him in 138 and reigned for 23 years, was called Pius (pious) because during his reign there were no wars. Antoninus Pius, unlike his predecessor, almost never moved from Rome. He was a man of exceptional virtues and died (161 A.D.) without great clamours, exactly as he had peacefully lived and governed the State. Already 15 years before he had chosen as co-regent his son-in-law, Marcus Aelius Verus Caesar, called Marcus Aurelius, who showed cultural inclinations and tastes similar to his own.

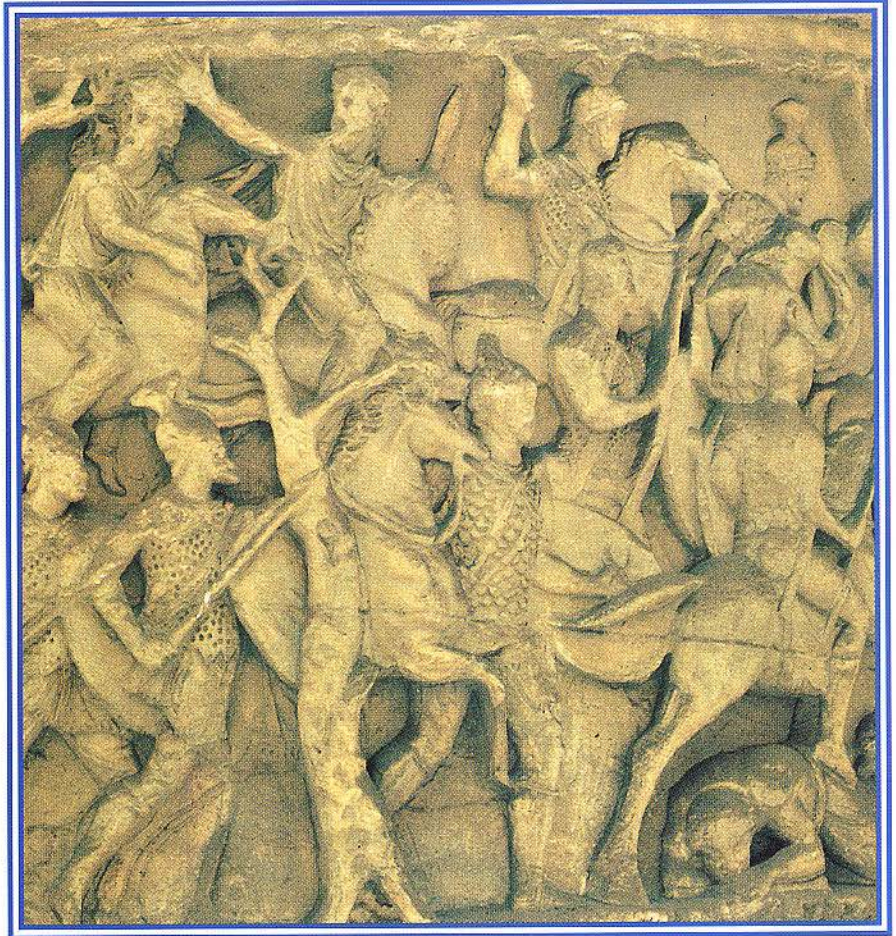
HIS LIFE AND CHARACTER

Marcus Aurelius was born in Rome, in 121 A.D., in a family of Spanish origin. He was a relative of Hadrian's and married Antoninus Pius' daughter, Faustina.

From Faustina he had four children: two daughters and a pair of twins. Of these two brothers, one died prematurely and the other, Commodus, was to become his successor.

He came from the Spanish family of the Aurelians, who had earned themselves the name of "Veri" owing to their honesty. He was orphaned when he was a few months old and was educated by his grandfather, who gave him 17 tutors, four of whom for grammar, one for mathematics and six for philosophy.

He conceived a passion for Stoic



philosophy, which he not only studied in depth but put into practice. At 12, he started to sleep naked on his bed and began a diet and an abstinency (also sexual) so strict that, in the end, his health was impaired. This did not prevent him from being a soldier among soldiers and to share their toils and hardships during the long years when he led the war on the German frontier.

Antoninus Pius had appointed him as his Caesar when he was still an adolescent and associated him to his government as a very young boy.

When Marcus was crowned, all the philosophers of the Empire exulted, for they saw in him the realization of utopia. But Marcus Aurelius' philosophy was tempered by the long apprenticeship made with Antoninus Pius, a conservative and moderately skeptical realist. As a true moralist he believed more in example and tried to give it by leading an ascetic life. The Romans, who remembered the debaucheries

of Caligula and Nero, ought to have appreciated him, even if, probably, did not try to imitate him.

Marcus Aurelius was forty when he ascended the throne and took a measure that had never been taken before in Rome's imperial history: he associated to himself Lucius Verus, Antoninus Pius' adoptive son. It can be surmised that he did it because he considered his body's frailty and because he wanted to devote himself to philosophy while in young Lucius there was everything he lacked, i.e., physical strength and the necessary qualities for the war campaigns.

Thus, on Marcus' initiative, Rome and the Empire had for the first time, and for about eight years, two Augusti of equal rights. The choice proved itself wrong immediately, because Lucius Verus was of a quite different mould: a world-wise man, philanderer, reveller with no inclination for any task requiring real responsibility. The cohabitation

lasted eight years, until Verus' death; but Marcus Aurelius had to carry alone the weight of all responsibilities.

Probably he had neither a penchant for weapons nor experience about them, but as he was forced to take up arms and fight for almost the entire duration of his reign, he fulfilled his princely duties at the head of a great defensive instrument whose efficiency, for the first time after Hadrian's reorganization, was put to the test with quite positive results.

THE WAR IN THE EAST (161 - 166)

The first years of his reign were dominated by the war in the East.

The immediate reason was once again the question of Armenia, a century-old prey contended by Romans and Parthians. Historical sources agree in attributing to the Armenian King Vologese the initiative and the first successes, which were all the more remarkable in that the Romans were expecting the war and were not taken by surprise, but were crushed by force. This shows the vastitude of the strategic design and the largeness of the means employed.

The war that Marcus had to face was in fact a just one. He sent Verus to the East with the task of settling the difficult situation. Verus was in no hurry, he was taken ill at Canusium and then very slowly, from island to island, reached Antioch in the spring of 163. Nevertheless, by that time, the deployment of the imperial forces was completed and the Syrian army reorganized by a tough oriental Syrian, Avidius Cassius.

In practice the whole planning of the operations against the Parthians was made by Marcus Aurelius and carried out by the valiant generals that were sent by Marcus Aurelius in support of Lucius Verus.

The vicissitudes of the war, which lasted until 166 and was distinguished by three main stages - Armenian (161-163), Parthian (163-165), Median (165-166) - cannot be reconstructed

for certain.

The operations were managed by the legates with skill and fortune, also thanks to the timely reorganization and hard training of the army; already by the end of 163 the powerful counteroffensive in Armenia was over and its capital Artaxata captured and destroyed.

Armenia did not become a province but remained an independent kingdom protected by Roman arms, as it had been under Hadrian.

Marcus Aurelius was not satisfied with this initial success. He realized that, if he wanted peace, he had to annihilate the enemy. He was not contented with having avenged the honour of the Roman arms and having made Armenia once more a Roman protectorate. The successive, mighty attack against Parthia testifies that he thought at least of an offensive defence. In a certain sense, by appropriating Trajan's ideas, he acted according to the spirit of Roman imperialism.

The offensive developed in Mesopotamia. The Euphrates was crossed, probably by throwing a pontoon-bridge, despite the enemy's strong resistance.

One army headed east, advancing beyond the Tigris, in the very heart of the Parthian dominions. Another column headed south, along the Euphrates, and was led by Avidius Cassius himself. Ctesiphon, the Parthian capital, was destroyed.

The Parthian expedition ended in 165. The entire war was practically concluded with it, even if the operations beyond the upper Tigris continued until the beginning of 166.

Rome's prestige was reestablished and the Empire's superiority over the East reaffirmed. But, above all, it was proved that the strong organization of the Empire, as it had been consolidated under the last Princes, was still sufficient to overcome the crises of this type.

But victory was not completed as planned by the Prince, owing to a serious emergency. In the autumn of 165, a terrible plague broke out among Cassius' troops, at Seleucia,

and its consequences became more and more dreadful, until, in the following spring, the army had to retreat.

The vast command over the entire East was assigned to Avidius Cassius, counting on his well-known energy to control the situation.

Once the operations were completed, some Legions went back to Italy, bringing contagion. The plague reached also Rome, spreading grief and desolation. In the capital alone over 200,000 people died. It advanced until the Rhine and, year after year, spread misery among the populations of the Empire. Behind the epidemic loomed famine, because nobody worked anymore.

The hour of peace had come to the East, but the plague empoisoned and saddened the joy for what had been accomplished.

THE WAR ON THE DANUBE AND ON THE GERMAN FRONTIER (167 - 180)

While the plague raged in Rome itself, another serious external crisis occurred. The series of difficult wars, which were to engage, with short interruptions, the remaining years of Marcus Aurelius' reign, started on the Danube. Seen from the inside, it was a mere frontier crisis, well controlled by the defensive instrument and overcome by the still vigorous vitality of the imperial organism. Nevertheless, because of its almost unexpected manifestation - after sixty years of comparative peace in the sector - for its gravity and duration and for the proximity of the danger to Italy which, for the first time after centuries, was trodden by a Barbarian foot, it made a great impression on the contemporaries.

What were the reasons for these wars?

A belt of states, which maintained more-or-less close "patron-and-client" relations with the Romans, extended over the Rhine and the Danube, from the North Sea to the

Bust of a Barbarian from a Germanic tribe.

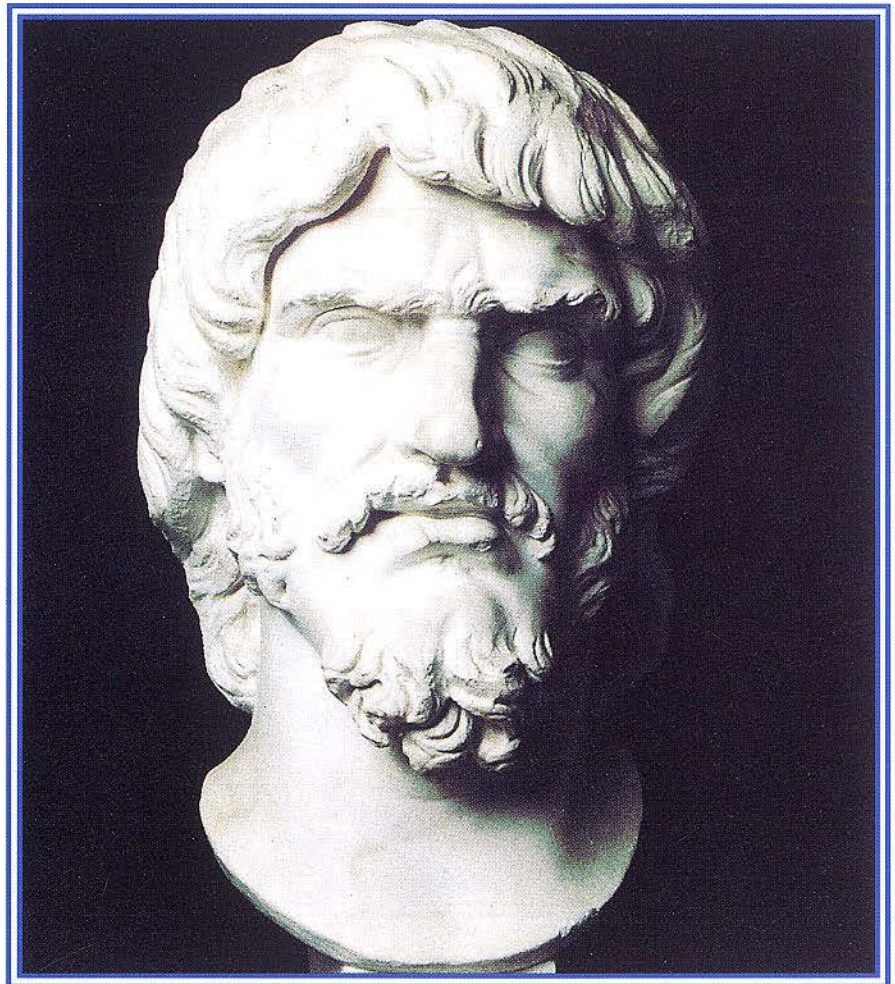
Black Sea. Beyond those two great rivers only Dacia, annexed by Trajan, with the transdanubian dependencies of Mesia, was directly under the Empire.

The only peoples having permanent client relations with Rome were those described above. They were a buffer against the attacks of the peoples of the deep interior, with whom they often came to grips for the reasons characteristic of Germanic particularism, which Rome wisely turned to its own advantage. In this way, for decades, these populations, secure from the Empire's side and interested in keeping good relations, because of the benefits of culture, trade and also protection that derived from it, fulfilled this function. Nevertheless, friends and allies as they were, they remained always outside the Empire. The Legionaries' camps and the line of fortifications stood against them and cut them from the world they considered civil, as only the world under Roman domination was.

This idyllic situation, created during the preceding decades, explains the reduced importance of the Rhine garrisons and the surprising absence of legionary camps from Strasbourg to Vienna.

However, now there was a problem of overpopulation, which the various Germanic peoples were unable to solve because intensive cultivation was unknown to them. Hunger prompted them to unite; hunger prompted them to make, all together; Barbarians of the frontiers and Barbarians of the interior; an attack on the Empire. Somehow occurred what, in a more-or-less near future, could happen for the opposition between the industrialized Western world and the so-called Third World, or the disintegrating Eastern and Balkan worlds.

The situation got worse under the thrust of a large migratory movement started by the Baltic



Germanics, who may have been under the pressure of the Scandinavian peoples.

The raids started in upper Germany and Raethia and were clear foreshadowings of the long struggle which forced the Emperor to leave Rome for the military camps. Here the crisis started with a disaster; as it had happened five years before in the East.

Along the Raethian limes and the upper Danube there were no legionary castra. At the frontiers the defence was not strong enough to resist the onrush of these enemy hordes and left the road open towards the Provinces and Italy.

The enemies crossed the Julian Alps and reached Northern Italy, where they laid siege to Aquileia at the exit of the Alpine roads, destroyed Opitergium (today's Oderzo) and spread terror as far as Verona: Rome trembled before this new invasion that resembled the Cimbrians'.

Nevertheless the Barbarian's advance was stopped.

Marcus Aurelius faced this crisis with calm and decision; rather than imposing new taxes on the impoverished provinces, he sold the gold and the art treasures of the imperial palaces.

He perceived with great lucidity the delicate strategic situation, certainly more dangerous than the former situation in the East. Parthia and Mesopotamia itself were too distant from the heart of the Empire to be always subjected to Rome's will. Now it was a matter of maintaining a defensive line of capital importance: its collapse would have meant danger, panic, ruin for Italy.

The Rhine frontier and its southern fortified ramparts, together with the Dacian rampart of the lower Danube, had proved to be the cornerstones of the defence. Nevertheless along the meanderings



Marcus Aurelius judging two Barbarian prisoners. (From a honorary monument to the Emperor, later used to decorate Constantine's Arch (III Gallica).

of the upper and middle river, the frontier ran much closer to Italy. The deep salient of the Hungarian Sarmatian plain represented a continuous source of possible disturbances and a useless extension of the imperial frontier. If the wars fought for two centuries had been crowned with the annexation of the territory of the Marcomanni (the area between the Elbe and the Oder) and successively of the Quadis (tribes living in today's Moravia), Bohemia and Moravia would have become the northern bulwark of the Empire.

The Roman interests required an offensive, which Marcus Aurelius carried out with farsseeing strategic intuition. Despite the enemy's extraordinary resistance the objective was achieved.

When he was seen leading the Legions headed for the Danube war, many probably snickered: that little man, frail and emaciated, accustomed to a vegetarian diet, did not seem to hold a great sway over

men. Nevertheless, he did; in an admirable way and with a great strategic vision, he defeated his enemies one by one (application of the mass principle).

Marcus Aurelius realized that the Roman defensive instrument consisted essentially of a border covering, with no more mobile manoeuvre troops in the interior than the scarce ones belonging to the praetorian guard. Thus it had happened that Barbarian units, breaking through the line in isolated points, pushed as far as Italy, which had no defence on the Alps.

He managed to provide what was lacking, i.e., a manoeuvre army and a system of protection for Italy. He constituted two new Legions and a suitable mobile Corps of remarkable strength (the Praetentura Italiae et Alpium), backed by a system of fortifications, forming an arch to protect the passes of the central-eastern Alps, from Raethia to Dalmatia.

He then constituted other forces

not assigned to any sector of the border, but destined to serve as mobile troops. This made up for the excessive heaviness of the standing army, still anchored to its camps. A special care was taken in selecting the Commanders, who proved themselves to be excellent men.

The offensive started and soon the Barbarian bands descended upon Italy disappeared beyond the Alps. But the objective of his expedition was certainly not Aquileia: Marcus proceeded to Pannonia.

He directed the operations from the Carnuntum camp. In this place he established his headquarters and stayed for three years, as Tiberius and Trajan had done before him.

Despite the satisfactory arrangements, Marcus Aurelius was convinced that the situation remained precarious, that the compromise with the Barbarians would not last long and that a radical solution could be obtained only by bringing the war to the enemy countries, restoring and keeping by force the "patron-and-client" bonds and the preexisting situation.

Marcus Aurelius ensured a further strengthening of the Legions by large recruitments. The force available, with twelve complete Legions and numerous Vexillationes, must have been the most imposing force yet deployed between Raethia and Dacia.

As was done in the Punic war, he recruited slaves and gladiators and engaged Germanic mercenaries: "Germanorum auxilia contra Germanos".

The arrangements predisposed show the Emperor's determination and the extent of the crisis, and prove once more Marcus Aurelius' military intuition. Not only did he protect the internal provinces and the communications between East

and West, but provided the basis for every surrounding and flanking movement that could be employed against the enemy.

Thus the Italian and the Illyrian situations were brought back to normality.

The Germanic and Sarmatian expeditions, which soon followed, led to a war that developed on a vast front, especially against the Marcomanni and the Quadis, who were backed by the Jazigi (tribes coming from southern Russia that had occupied a part of Mesia).

The general plan of the offensive aimed at breaking the unity of the Barbarian coalition, attacking the nations one by one, and possibly inciting them to fight each other.

Penetrated beyond the Danube, Marcus Aurelius conducted the war with great faith in the Divinity, not only by expressing his own piety, but by participating also in the cults and superstitions of the soldiers, who credited their Emperor with divine talents. Legends flourished, such as the one concerning a thunderbolt that, on Marcus Aurelius' prayer, burnt an enemy war-machine to ashes. Or the other one, telling about a miraculous rain which saved the Romans, exhausted by heat and thirst during a great battle, which was thus transformed from certain defeat into victory.

The Quadi, the Marcomanni and, last, the Jazigi were successively defeated.

Peace was granted but on hard conditions, one of which was that a belt of ten miles beyond the Danube was to be left empty and garrisoned by Roman units.

After the wars against the Quadis, the Marcomanni and the Jazigi, the Emperor had a considerable number of Germanic prisoners deported to Italy to work as farmers, and another group entered the army as auxiliary troops. These two actions started the Germanic penetration into the Roman social texture.

The long and complicated war vicissitudes had convinced Marcus Aurelius that only war to the death



and, prospectively, the direct annexation and completion of the system of which Dacia was an isolated pillar, could ultimately solve the Danubian problem.

His sudden death in Vienna, in 180 A.D., prevented him from carrying out his strategic design.

THE REVOLT OF AVIDIUS CASSIUS

In May of 174, while he was still engaged in the Danubian war, Marcus Aurelius learnt of the revolt of Avidius Cassius in the East.

He was for an instant shaken by the news, but he soon found his courage again, declined the "barbarian" help that had been offered to him, so that foreigners would not be informed of the shame of the Roman civil war. Then, more agreeable news came for the Emperor: Cassius had been killed by a Centurion. The rebel's head was sent to him but Marcus Aurelius

Sarcophagus of one of Marcus Aurelius' generals. (From Portonaccio; end of 2nd Century A.D.).

refused to receive the men that brought it and gave orders that the rebel be buried. Cassius' death averted civil war.

This sad experience made him worry about the repercussions on the army, already tried by the unending war on the Danube. Nevertheless, there were no episodes of disloyalty from the Commanders and the troops of the Danubian army; on the contrary, the whole course of the war showed discipline and attachment to the Prince who, despite his different inclination and physical frailty, was an example of military virtue and justice for all. He had won the soldiers' souls so much that he could refuse a donative after a victory, saying that the money was drawn from the blood of their parents and kinsmen.

THE ADMINISTRATION OF THE STATE

As regards internal policy, Marcus Aurelius revealed himself respectful of the Senate's prerogatives, permitting it to discuss all the most important affairs of State, such as the declaration of war and the treaties stipulated with other Peoples.

He also promoted a policy aimed at bringing out other social classes: men from all provinces were enabled to reach the highest offices of the State's administration. Neither wealth nor famous ancestors influenced Marcus Aurelius's judgement, only personal merit.

He could not realize his Stoic ideals of equality and liberty, because the need to control the local finances led him to constitute a bureaucratic class that soon demanded rights and privileges and became a closed group (like today's worst bureaucracy).

The administrative organization introduced by Augustus almost 150 years before - which up to then had served the Empire excellently, saving it even when dissolute Emperors, like Caligula and Nero, had reigned, or at the time of the civil war of 69.-was starting to acquire full awareness of its power. As always happens when power ceases to be felt as a service but is considered an instrument for self-assertion, its nature degenerated: the officials of that great administration started turning into a blind and narrow-minded bureaucracy. This was the first step towards the absolute state-centred conceptions of some of Marcus Aurelius' successors.

Even if he was continuously engaged in wars, especially on the Danubian frontier, Marcus Aurelius was actively concerned with the administration and the laws and tried to mitigate the conditions of the slaves, encouraging their emancipation.

He also tried new trade ways: remarkable was a diplomatic mission sent to the Chinese Emperor

in 166. The Chinese knew him by the name of An-Tun.

He instituted the Registry, every Roman citizen was obliged to register his children within 30 days from birth.

He did not employ the money in splendid architectural works but in absolutely necessary works of reconstruction, or in improvements of the road network, that was essential for the Empire's defence and for commercial progress, in strongholds, camps and cities. Marcus Aurelius' imposing column, standing in front of Palazzo Chigi in Rome (42 metres high), was erected after his death in remembrance of his victories on the German-Danubian front. The column was crowned by a statue of the Emperor; now there is a statue of St Paul (it is the same destiny of Trajan's column which now has on its top a statue of St Peter).

THE END

On the 17 of March 180, in Vienna, before being able to start the conclusive operations of the Danubian war, the Emperor passed away. On his deathbed he beseeched his son Commodus "not to neglect the aftermath of the war". Had he lived a year more, he would have completed the policy of his predecessors: Caesar, Augustus, the Flavians and Trajan.

After the Emperor's death, just as he was about to realize his programme, Commodus renounced his father's objectives. Once more there was a parallelism with Trajan: the latter, in 117, had left to his cousin Hadrian the task to perfect his work and Hadrian had addressed himself to another policy; in 180 the destiny of the two first Spanish Emperors repeated itself, when Commodus backed off from completing his father's magnificent undertakings.

His image is that of a noble Emperor, conscious of his responsibilities. He was condemned by the events to an almost uninterrupted military activity (which he had wanted to delegate

to Lucius Verus) and from philosopher-Emperor he had to transform himself into a philosopher with a breastplate.

The equestrian statue that dominates the Piazza del Campidoglio in Rome, has the features of a warrior but his eyes are those of a philosopher who sees the end of an historical phase. In that melancholy look are all the contradictions between a moral dictate tending to freedom and equality and the necessities of realpolitik, which tends to preserve and consolidate the existing imperialism. He realizes that the victories obtained will not stop the course of history; he clearly feels that the Barbarian's hunger will prevail over the force of the Romans and that the irreversible crisis of the Roman Empire is in progress.

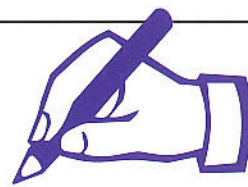
When, for the last time, he was asked for a "password", Marcus Aurelius' answer was: "Go towards the rising sun, my sun is setting". And that was also the sunset of the ancient world. That is perhaps the reason why he was the last of the great Roman Emperors.

With Marcus Aurelius we also end this brief excursus on one of the finest periods of Roman history through its greatest Emperors. More than 220 marvellous years, also thanks to the great Emperors who have marked the development of Rome's imperial history. We have followed its ascent, which started with Caesar, was perfected by Augustus, consolidated by Tiberius and Vespasian until the summit was reached by Trajan and maintained by Hadrian. From then on, the crisis assumed extraordinarily vast proportions in the III century, was temporarily arrested by Diocletian and Constantine, until the final ruinous fall in the V century.



** Major General,
Chief, 4th Division,
D G S*

SOMMAIRE INHALT RESUMEN



«L'Armée de Terre pour l'Europe et pour le Pays. L'architecture de Commandement et Contrôle», par Claudio Graziano (p. 2).
Cet article analyse l'architecture de Commandement et Contrôle des forces destinées à opérer hors du territoire national. Par rapport aux exigences de tour ils seraient nécessaires, en plus de COMFOTER, quatre Commandements à niveau de Division entendus comme des «États Majeurs de planification projetables» sans des Unités leur subordonnées. À niveau de l'OTAN, en comparaison de sept Commandements à niveau fondamentalement statique, seulement l'ARCC répond aux critères indiqués. Un Commandement pareil, à base «framework» italienne, serait convenable pour la Région Sud de l'OTAN.

Forces multinationales. La nouvelle frontière de l'Armée de Terre, par Giorgio Cuzzelli (p. 20).
L'Armée de Terre italienne a pris le rôle de premier plan sur la scène mondiale grâce surtout à l'élevé niveau d'intégrabilité atteint dans les panoramas internationales. La nouvelle défi consiste en l'entreprendre des formes de collaboration avec les forces multinationales nées hors de l'OTAN et des l'UE/UEO, parmi lesquelles:
• la SHIRBRIG (Stand-by High Readiness Brigade for United Nations), qui doit fournir à les Nations Unies une efficace capacité d'intervention rapide;
• la MLF (Multinational Land Force), destinée à la sûreté collective et à la coopération internationale.

«Les armements de destruction de masse à la fin du XXème siècle», par Luigi Semprini (p. 32).
L'histoire politique-stratégique du XXème siècle a été marquée par la progressive prolifération d'arsenals nucléaires, chimiques et bactériologiques, considérés de sûres instruments de dissuasion. Les événements des décennies dernières ont d'ailleurs soulignés l'épuisement de l'efficacité des armements de destruction de masse contre les constantes menaces de conflit. L'emploi des États dans le développement économique et technologique et dans la modernisation des armements conventionnels, ainsi que les efforts de la diplomatie pour le respect des règles antiprolifération, constituent le

nouveau antidote contre cette menace, la nouvelle garantie de stabilité et de sûreté de chaque État.

Les paramètres de la puissance, par Vittorio Barbatì (p. 44).
La puissance d'un État ou d'une coalition est le résultat de facteurs matériels et immatériels. La capacité militaire, pendant l'actuelle phase historique, peut être évaluée selon deux paramètres: le pouvoir de «dissuasion» et la «projection des forces». Le premier paramètre est fondé sur l'efficacité de la réponse à un soudain attaque, en combinant les moyens nucléaires, conventionnels, offensives et de défense. Le deuxième se fonde sur une série de facteurs politiques (envie d'utiliser la force) et techniques (disponibilité des forces avec mobilité stratégique).

Le Traité sur les forces conventionnelles en Europe (CFE), par Maurizio Boni (p. 52).
L'accord, signé à Istanbul le 18 novembre passé, a le but de surpasser le contraste bipolaire par l'introduction de «toits nationales» (NC-National Ceiling) en substitution des limites collectifs à propos des armements et des équipements prévus en 1992. Pour éviter des concentrations de forces et les conséquents effets de destabilisation on a fait recours à la définition de «toits du territoire» (TC-Territorial Ceiling), c'est-à-dire de niveaux maximums d'équipements établis avec le Traité des Forces Conventionnelles en Europe (TLE-Treaty Limited Equipement), qui comprennent d'éventuelles forces allogènes présentes sur place. Pour donner, après de ça, une majeure efficacité à l'essai de limiter et réduire les armements conventionnels en Europe, on a beaucoup de nouvelles hypothèses de négociation avec les Pays OSCE en chantier.

L'Alliance Atlantique. Un coup d'oeil vers le futur, par Giuseppe Santangelo (p. 60).
Le Summit de Washington de l'Avril 1999 a souligné la nécessité que l'Alliance Atlantique procède à une révision radicale de sa propre stratégie par donner des réponses efficaces aux nouvelles exigences opérationnelles, qui naissent du changé cadre international. Ils sont deux les piliers sur lesquels il faut fonder l'OTAN du futur:
• l'interopérabilité des Forces Alliées, finalisée à mettre en fuite le danger d'un développement technologique non homogène;
• la coopération, étendue à tout le continent, afin de donner vie à un instrument militaire européen croyable et complémentaire à l'américain pour la

défense et la sûreté planétaire.

Autriche: les nouvelles Forces Armées. Entrevue au Général Horst Pleiner, par Enrico Magnani (p. 68).
L'Autriche a mis en marche un processus de réorganisation des Forces Armées pour les élever aux nouvelles exigences liées aux missions internationales. Les efforts sont le but de la construction d'un instrument militaire capable de s'insérer opportunément dans des contingents multinationales par contribuer à la défense et à la sûreté européenne et au maintien de la paix dans le monde.

«Suède. Les nouvelles Forces Armées. Entrevue au Général Owe Erik Axel Wiktorin, Haut Commandant des Forces Armées Suédoises», par Enrico Magnani (p. 74).
Les Forces Armées suédoises sont employées en une difficile réorganisation de l'instrument militaire qui prévoit la réduction des forces de protection et l'augmentation de celles de projection. Tout ça au fin de participer en plein titre aux opérations de support à la paix et permettre aux Unités militaires de s'insérer dans les formations multinationales. L'expérience faite en Kosovo a mis en lumière la nécessité d'avoir une plus forte interrelation entre les forces militaires et les organisations non combattantes.

Lignes de mineure prévisibilité et méthodologies relatives, par Giovanni Semeraro (p. 80).
Le processus de décision et de planification constitue toujours un élément décisif pour le résultat des opérations de guerre. Sûrement suivre les lignes de mineure prévisibilité comporte des risques, mais il n'est pas important si «le jeu ne vaut pas la chandelle»? L'histoire nous enseigne que la doctrine infallible n'existe pas, mais quelque fois on doit s'éloigner de la doctrine pour faire place à sa propre initiative et créativité. C'est pour cette raison que César n'a été pas vaincu à Pharsale: car il a eu confiance en ses propres intuitions. Il est fondamental de développer et de renforcer les capacités de décision des Cadres en faisant appel aussi, s'il y en a besoin, à des simulations.

«Centres de simulation et d'instruction au combat», par Fabrizio Castagnetti (p. 88).
À l'École de Guerre, à l'École d'Infanterie et aux zones d'instruction militaire de Capo Teulada et Monteromano on est en train de réaliser deux Centres dédiés à l'exercice du Commandement et Contrôle et deux Centres pour l'instruction militaire et la



SOMMAIRE INHALT RESUMEN

valuation des Unités. Tout ça a le but de doter la Force Armée italienne d'une structure d'organisation capable de valuer la promptitude à l'emploi des Sièges des Unités et des Unités mêmes. La condition essentielle par poursuivre cet objectif est l'avoir à disposition de suffisantes ressources financières. Le résultat final sera celui de placer l'Armée de Terre italienne aux mêmes niveaux des autres instruments militaires européens.

Les Empereurs Romains. Marc Ulpio Trajan, par Carmine Fiore (p. 94).

La principauté de Trajan a été caractérisée de beaucoup d'actions de guerre orientées à l'accroissement des limites de l'Empire. L'Empereur a été l'auteur d'importantes conquêtes: la Dacie et l'Arabie nord-occidentale. Il a battu pour quatre ans sur le front orientale pour vaincre les Parthes et pour permettre à Rome de gagner les quais du Golfe Persique. À la capacité de grande stratégie, le "princeps" a su unifier celles d'un très bon administrateur, en réalisant d'importantes œuvres infrastructurelles et en effectuant de concrètes initiatives économiques et sociales. Il est mort à 64 ans, après avoir «régné» pour presque une période de vingt ans.

Les Empereurs Romains. Marc Aurélie, par Carmine Fiore (p. 106).

Marc Aurélie, gendre du pacifique Antoine Pie, est devenu Empereur à l'âge de 40 ans en 161. Adonné à la philosophie stoïque, homme fragile et émacié, il ne semblait pas apte au rôle de vaillant condottiere et meneur de soldats. Mais il a donné épreuve de grande vision stratégique et de remarquable intuition militaire et politique pendant la guerre d'Orient contre les Parthes et successivement pendant les deux guerres sur le Danube contre les Germains. Marc Aurélie a réaffirmé le prestige et la supériorité de l'Empire en Orient; fermement et abilement il a repoussé les barbares descendus en Italie et a déclenché l'offensive au-delà du Danube, en restaurant l'organisation politique préexistante et les vieux liens de clientèle qui ces peuples avaient avec les Romains.



Streitkräfte für Europa und für Italien. Der Aufbau von Kommando und Kontrolle,

von Claudio Graziano (S. 2).

Der Aufsatz untersucht den Aufbau von Kommando und Kontrolle derjenigen Streitkräfte, die außerhalb des italienischen Staatsgebietes operieren sollen. In bezug auf die Bedürfnisse der Dienstablösung sind ausser der COMFOTER vier Kommandos auf Divisionsebene wünschenswert, im Sinne von «Planungs- und Projektierungsstäben» ohne fest von ihnen abhängige Einheiten. Auf NATO-Ebene steht sieben tendenziell statischen Kommandos lediglich ARCC gegenüber, das die erwähnten Kriterien erfüllt. Ein analoges Kommando - mit italienischer Grundstruktur - wäre für das südliche NATO-Gebiet opportunistisch und wünschenswert.

Multinationale Kräfte. Die «new frontier» (neue Grenze) der Streitkräfte, von Giorgio Cuzzelli (S. 20).

Die italienischen Streitkräfte haben eine sehr sichtbare Rolle auf der Weltbühne eingenommen, und dies vor allem aufgrund des hohen Masses an Integrierungsfähigkeit, das sie im internationalen Kontext erreicht haben. Die neue Herausforderung besteht darin, Formen der Zusammenarbeit mit multinationalen Kräften, die ausserhalb der NATO und der EU/WEU entstanden sind, zu unternehmen, wie z.B. mit der SHIRBRIG (Stand-by High Readiness Brigade for United Nations), deren Aufgabe es ist, den Vereinten Nationen eine wirksame Fähigkeit zum schnellen Eingreifen zu verleihen, oder die MPFSEE (Multinational Peace Force South Eastern Europe), die die Aufgabe hat, für Zusammenarbeit und subregionale Stabilität in Südosteuropa zu sorgen, oder wie die MLF (Multinational Land Force), die der kollektiven Sicherheit und der internationalen Kooperation dient.

Massenvernichtungswaffen am Ende des 20. Jahrhunderts, von Luigi Semprini (S. 32).

Die politische und strategische Geschichte des 20. Jahrhunderts ist durch die zunehmende Verbreitung von atomaren, chemischen und bakteriologischen Arsenalen gekennzeichnet gewesen, die als sichere Abschreckungselemente galten. Die Entwicklung der letzten Jahrzehnte hat hingegen deutlich gemacht, dass der Abschreckungseffekt der Massenvernichtungswaffen angesichts der ständig drohenden Konflikte nicht mehr viel von seiner Wirkung behalten hat. Die Investition vieler Staaten in die wirtschaftliche und technologische Entwicklung und in die Modernisierung der konventionellen Bewaffnung und die diplomatischen Bemühungen um die Nichtverbreitung sind das neue

Gegenmittel gegen die Bedrohung, sind eine neue Garantie von Stabilität und Sicherheit eines jeden Staates.

Die Maßstäbe der Macht, von Vittorio Barbatì (S. 44).

Die Macht eines Staates oder eines Bündnisses ist das Ergebnis materieller und immaterieller Faktoren. Militärische Fähigkeit kann in der historischen Phase, in der wir leben, nach zwei Maßstäben bewertet werden: der «Abschreckungsmacht» und der «Projektion von Kräften». Der erste Maßstab basiert auf der wirksamen Antwort auf einen plötzlichen Angriff, indem man nukleare und konventionelle, offensive und defensive Mittel kombiniert. Der zweite begründet sich auf einer Reihe politischer (dem Willen zur Gewaltanwendung) und technischer Faktoren (das Verfügen über strategisch mobile Streitkräfte).

Das Abkommen über konventionelle Streitkräfte in Europa (CFE), von Maurizio Boni (S. 52).

Das in Istanbul am 18. November vergangenen Jahres unterzeichnete Abkommen zielt auf die Überwindung des bipolaren Gegensatzes durch die Einführung von «nationalen Obergrenzen» (NC - National Ceiling), die die Gesamtgrenzwerte über Bewaffnung und Ausrüstung von 1992 ersetzen. Um Konzentrationen von Streitkräften und daraus resultierende Destabilisierungseffekte zu vermeiden, hat man auch «territoriale Obergrenzen» definiert (TC - Territorial Ceiling), d.h. eine im Abkommen der konventionellen Kräfte in Europa festgelegte Ausrüstungshöchstgrenze (TLE - Treaty Limited Equipment), die etwaige fremde Truppen am Einsatzort einschliessen. Um dem Versuch zur Begrenzung und Verminderung der konventionellen Bewaffnung in Europa mehr Nachdruck zu verleihen, sind neue Verhandlungen zwischen den OSZE-Ländern angedacht.

Anpassung der NATO: ein Blick in die Zukunft, von Giuseppe Santangelo (S. 60).

Der Gipfel von Washington im April 1999 hat die Notwendigkeit für die Atlantische Allianz unterstrichen, sich einer radikalen Überprüfung der eigenen Strategie zu unterziehen, um überzeugende und wirkungsvolle Antworten auf die neuen operativen Bedürfnisse zu liefern, die durch die neue internationale Gesamtsituation gegeben sind. Zwei sind die Pfeiler, auf die die zukünftige NATO gebaut werden soll: Interoperabilität der Alliierten Kräfte, die das Ziel hat, die Gefahr eines nicht homogenen

SOMMAIRE INHALT RESUMEN



technischen Fortschritts abzuwehren, sowie die alliierte Zusammenarbeit, die auf ganz Europa ausgedehnt werden soll, um eine europäische Militärmacht ins Leben zu rufen, die glaubhaft und komplementär zu der amerikanischen ist und mit dieser zusammen die Verteidigung und die Sicherheit der Welt gewährt.

Österreich: Die neuen Streitkräfte.

Interview mit Gen. Horst Pleiner, geführt von Enrico Magnani (S. 68).

Österreich hat einen Umorganisationsprozess der Streitkräfte in Gang gesetzt, um sie den neuen Bedürfnissen im Zusammenhang mit internationalen Missionen anzupassen. Man bemüht sich, einen militärischen Apparat zu schaffen, der in der Lage ist, sich in angemessener Weise in multinationale Kontingente einzugliedern, um zur Verteidigung der europäischen Sicherheit und zur Erhaltung des Friedens in der Welt beizutragen.

Schweden. Die neuen Streitkräfte.

Interview mit General Owe Erik Axel Wiktorin, Oberkommandierendem der schwedischen Streitkräfte, von Enrico Magnani (S. 74).

Die schwedischen Streitkräfte sind in einer schwierigen Phase der Umorganisation, die eine Verringerung der Defensiv- und eine Verstärkung von Offensiv- oder Projektionskräften vorsieht. Dies dient dem Zweck, voll gleichberechtigt an friedensunterstützenden Einsätzen teilnehmen zu können, und die Einfügung schwedischer Militäreinheiten in multinationale Kontingente zu ermöglichen. Die Erfahrung des Kosovo hat die Notwendigkeit eines engeren Wechselverhältnisses und stärkerer Beziehungen zwischen Streitkräften und Nichtkampfeinheiten unterstrichen.

Geringere Vorhersehbarkeit und Entsprechende Verfahrensweisen, von Giovanni Semeraro (s. 80).

Der Prozess von Entscheidung und Planung stellt stets ein entscheidendes Element für den Ausgang militärischer Operationen dar. Sicherlich bringt es Risiken mit sich, eine geringere Vorhersehbarkeit in Kauf zu nehmen, doch welche Bedeutung hat dies, wenn das Ergebnis stimmt? Die Geschichte lehrt uns, dass es keine unfehlbare Militärdoktrin gibt, und dass man sich manchmal von der Lehrmeinung lösen muss, um Eigeninitiative und Kreativität Platz zu machen. Wenn Cäsar nicht seiner Intuition vertraut hätte, wäre die Entscheidungsschlacht von

Pharsalos (48 v. Chr. zwischen Cäsar und Pompeius) eine Niederlage geworden. Daher ist es grundlegend, die Entscheidungsfähigkeit der Offiziere zu entwickeln und zu stärken, wobei man, wenn es notwendig ist, auch Simulationen nicht ausschliessen sollte.

Simulations- und Kampfausbildungszentren, von Fabrizio Castagnetti (S. 88).

In der Nähe der Scuola di Guerra («Kriegsschule»), der Infanterieschule und den Übungsplätzen von Capo Teulada (Sardinien) und Monteromano (Mittelitalien) sind zwei Zentren zur Durchführung von Kommando und Kontrolle und zwei Zentren zur Ausbildung und Bewertung der Einheiten in der Entstehung begriffen. Ziel ist es, die Streitkräfte mit einer Organisationsstruktur zu versehen, die in der Lage ist, die Einsatzbereitschaft der Kommandos und der Einheiten zu bewerten. Grundvoraussetzung für die Verfolgung dieses Zieles ist es, über genügend finanzielle Ressourcen zu verfügen. Das Endergebnis wird sein, das italienische Heer auf das gleiche Niveau der anderen europäischen Streitkräfte zu bringen.

Die Römischen Kaiser. Marcus Ulpius Traianus, von Carmine Fiore (S. 94).

Traians Prinzipat ist gekennzeichnet durch eine Reihe kriegerischer Aktivitäten, die darauf abzielen, die Grenzen des Römischen Reiches auszuweiten. Dieser Kaiser war Urheber wichtiger Eroberungen, nämlich dem Land der Daker sowie dem Nordosten der Arabischen Halbinsel. An der Ostgrenze kämpfte er vier Jahre lang und besiegte die Parther, wodurch das Römische Reich bis zum Persischen Golf durchdrang. Seinen großen strategischen Fähigkeiten wusste der «Princeps» jene eines vorzüglichen Verwalters hinzufügen, indem er wichtige Infrastrukturarbeiten durchführte und konkrete wirtschaftliche und soziale Initiativen ergriff. Der Tod ereilte ihn mit 64 Jahren, nachdem er etwa zwanzig Jahre lang regiert hatte.

Die römischen Kaiser. Mark Aurel, von Carmine Fiore (S. 106).

Mark Aurel, der Schwiegersohn des friedlichen Antoninus Pius war, stieg im Jahre 161 n. Chr. im Alter von vierzig Jahren auf den Kaiserthron. Er war Anhänger der stoischen Philosophie und eine hagere und zerbrechliche Gestalt: er schien nicht gerade geeignet für die Rolle des tapferen Heerführers, der Soldaten mitreissen würde. Doch bewies er einen großen strategischen Überblick und eine

bemerkenswerte militärische und politische Intuition im Orientfeldzug gegen die Parther und danach in den beiden Kriegen an der Donau gegen die Germanen. Mark Aurel hat das Prestige und die Überlegenheit des Römischen Reiches im Osten unterstrichen, mit Nachdruck und Geschick die in Italien eingefallenen Barbaren (die Germanen) zurück über die Alpen gejagt, und sogar eine Offensive über die Donau hinaus unternommen. Dadurch stellte er das frühere Gleichgewicht und die angestammten Klientelbindungen wieder her, die diese Völker mit den Römern gehabt hatten.



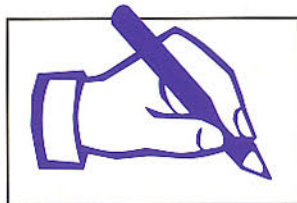
«El Ejército para Europa y para el País. El arquitectura de Mando y Control», de Claudio Graziano (p. 2).

El artículo analiza la arquitectura de Mando y Control de las fuerzas aptas para operar afuera del País. Para lo que atañe las exigencias de turnos serían deseables, además de COMFOTER, cuatro Mandos a nivel divisional como «Estados Mayores de planificación proyectables» sin Unidades a las estables dependencias. A nivel OTAN, en frente a siete Mandos de nivel tendencialmente estáticos, solo el ARCC responde a los requisitos indicados. Un Mando similar, a base «framework» italiana, sería necesario para la Región Sur de OTAN.

Fuerzas multinacionales. La nueva frontera del Ejército, de Giorgio Cuzzelli (p. 20).

El Ejército italiano tomó el rol de primer plano en la escena mundial gracias a la integrabilidad donde llegó internacionalmente. La nueva «lucha» consiste en intraprender formas de colaboración con Fuerzas Multinacionales nacidas afuera de OTAN y de UE/UEO, entre las cuales:

- la SHIRBRIG (Stand-by High Readiness Brigade for United Nations), orientada para suministrar a las Naciones Unidas una eficaz capacidad de intervención rápida;
- la MPFSEE (Multinational Peace Force South Eastern Europe), finalizada a la cooperación y a la estabilidad sub-regional en Europa Sudoriental;



SOMMAIRE INHALT RESUMEN

• la MLF (Multinational Land Force), finalizada a la seguridad de todos y a la cooperación internacional.

«Las armas de destrucción de masa al fin del siglo XX», de Luigi Semprini (p. 32).

La historia político-estratégica del siglo XX fue caracterizada por progresivo aumento de arsenales nucleares, químicos y bacteriológicos, vistos como elementos seguros de disuasión y derrota. Los hechos de los últimos años subrayaron la fin de la eficacia de las armas de destrucción de masa contras las constantes amenazas de luchas. El empleo de los Estados en el desarrollo económico y tecnológico y en la modernación de los armamentos convencionales, y además de los esfuerzos de la diplomacia por el respecto de las reglas de antiproliferación, constituyen el nuevo antídoto contra la amenaza, la nueva garantía de estabilidad y de seguridad de cada País.

Los parametros de la potencia, de Vittorio Barbatì (p. 44).

La potencia de un Estado o de una coalición es un conjunto de factores materiales e inmateriales. La capacidad material puede ser evaluada bajo de parametros: el poder de «deterencia» y la proyección de fuerzas. El primero se basa en la eficacia de la contestación a un ataque, juntando medios nucleares convencionales, ofensivos y defensivos. El segundo se basa en una serie de factores políticos (voluntad de usar la fuerza) y técnicos (disponibilidad de fuerzas con nobilidad estratégica).

El tratado sobre las fuerzas convencionales en Europa, de Maurizio Boni (p. 52).

El acuerdo, firmado en Istanbul el 18 de noviembre pasado, se fija en el superar la contraposición bipolar gracias a la introducción de «cielos nacionales» (NC-National Ceiling) para substituir los límites colectivos de los armamentos y equipos previstos en 1992. Para evitar concentraciones de fuerzas y consiguientes efectos de destabilización se definieron los «TC-Territorial Ceiling», esto es los niveles máximos de los equipos establecidos con el Tratado de las Fuerzas Convencionales en Europa (TLE-Treaty Limited Equipment), comprensivos de las eventuales fuerzas ajenas presentes en lugar. Para conferir máxima eficacia en el intento de reducir los armamentos convencionales en Europa se están pensando nuevas hipótesis de negociación con los Países OSCE.

«Balançamento de OTAN: una mirada

hacia el futuro», de Giuseppe Santangelo (p. 60).

El Summit de Washington de Abril de 1999 evidenció la necesidad que la Alianza Atlántica llegue a un control radical de su estrategia para buscar respuestas eficaces para las nuevas exigencias operativas, que salen del cambiado cuadro internacional. Son dos las columnas en las que se basa OTAN del futuro:

- la interoperabilidad de las Fuerzas Aliadas, que tiene como fin alejarse del peligro de un desarrollo tecnológico no omogeneo;
- la cooperación, extendida por todo el Continente, para construir un instrumento militar europeo creible y complementarse a lo estadounidense para la defensa y la seguridad del planeta.

Austria: las nuevas Fuerzas Armadas. Entrevista al General Horst Pleiner, de Enrico Magnani (p. 68).

Austria empezó un proceso de reorganización de las Fuerzas Armadas para adecuarlas a las nuevas exigencias internacionales. Los esfuerzos son para construir un instrumento militar capaz de entrar en los contingentes multinacionales para contribuir a la defensa de la seguridad europea y al mantenimiento de la paz en el mundo.

«Suecia. Las nuevas Fuerzas Armadas. Entrevista al General Ove Erik Axel Wiktorin, Jefe Mayor de las Fuerzas Armadas Suecas», de Enrico Magnani (p. 74).

Las Fuerzas Armadas suecas están empleadas en una difícil reorganización del instrumento militar que prevee la reducción de las fuerzas de protección y un añadir de las de proyección para participar plenamente a las operaciones de ayuda para la paz y para evadir repartos militares en las formaciones multinacionales. La experiencia en Kosovo evidenció la necesidad de una relación más cerrada entre las fuerzas militares y las organizaciones de los que no son luchadores.

Lineas de menor prevedibilidad y relativas metodologías, de Giovanni Semeraro (p. 80).

El proceso decisonal y de planificación constituye siempre un elemento fundamental por el éxito de las operaciones de guerra. Seguramente seguir las líneas de menor prevedibilidad lleva riesgos, pero ¿qué importa si «el juego vale la vela»? La historia nos enseña que la doctrina inequívoca no existe, y que a veces es importante alejarse de la doctrina por dar espacio a su iniciativa y

creatividad. Si Cesar no se hubiese confiado en sus intuiciones, Farsalo habría sido una magra derrota. Por eso es importante desarrollar y reforzar las capacidades decisonales de los Cuadros utilizando también, si es el caso, las simulaciones.

«Centros de simulación y adiestramiento a la lucha», de Fabrizio Castagnetti (p. 88).

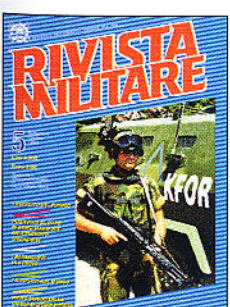
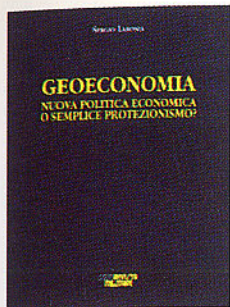
Están para realizarse en la Escuela de Guerra, en la Escuela de Infantería y en las áreas de adiestramiento de Capo Teulada y Monteromano, dos centros dedicados al ejercicio de Mando y Control y dos Centros para el adiestramiento y la valoración de las Unidades. El fin es de dar a la Fuerza Armada una estructura organizativa capaz de valorar la rapidez de los Comandos y de las Unidades. Condición fundamental para llegar a este fin es tener bastante dinero. El resultado final verá poner el Ejército Italiano al mismo nivel de los otros instrumentos militares europeos.

Los Imperadores romanos, Marco Ulpio Traiano, de Carmine Fiore (p. 94).

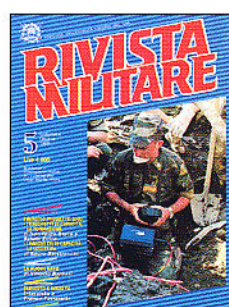
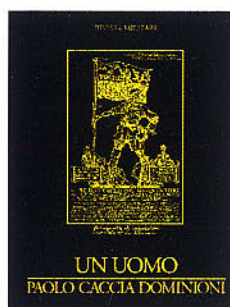
El principado de Traiano se caracterizó por una serie de acciones belicas para agrandar los confines del Imperio. El Emperador fue artefacto de importantes conquistas: la Dacia y la Arabia norte-occidental. Luchó por cuatro años al frente oriental para vencer los Partes y permitir a la Urbe de llegar a las orillas del Golfo Persico. A las capacidades de gran estrategia, el «princeps» supo juntar las de optimo administrador, realizando importantes obras infraestructurales y concretas iniciativas económicas y sociales. Se murió a los 64 años, después de reinar por veinte años.

«Los Imperadores romanos. Marco Aurelio», de Carmine Fiore (p. 106).

Marco Aurelio, hijo del pacífico Antonio Pío, subió al trono a cuarenta años en 161 d.C.. Amante de la filosofía stoica, hombre frágil y macilento, no parecía adaptado al papel de valiente luchador y jefe de soldados. Dió, al contrario, prueba de grande visión estratégica y gran intuición militar y política en la guerra de Oriente contra a los Partes y pues en las dos guerras contra los alemanes en el Danubio. Marco Aurelio afirmó el prestigio y la superioridad del Imperio de Oriente; con audacia y convicción echó los barbaros en Italia y pegó la ofensiva al otro lado del Danubio restableciendo la situación precedente y las antiguas amistades de clientela que aquellos pueblos tenían con los Romanes.



THE EDITORIAL STYLE OF RIVISTA MILITARE



RIVISTA MILITARE

JOURNAL OF THE ITALIAN ARMY FOUNDED IN 1856





JOURNAL OF THE ITALIAN ARMY FOUNDED IN 1856

RIVISTA MILITARE

3

SEPTEMBER
OCTOBER
NOVEMBER
DECEMBER
2000

Lire 4000

Euro 2.06

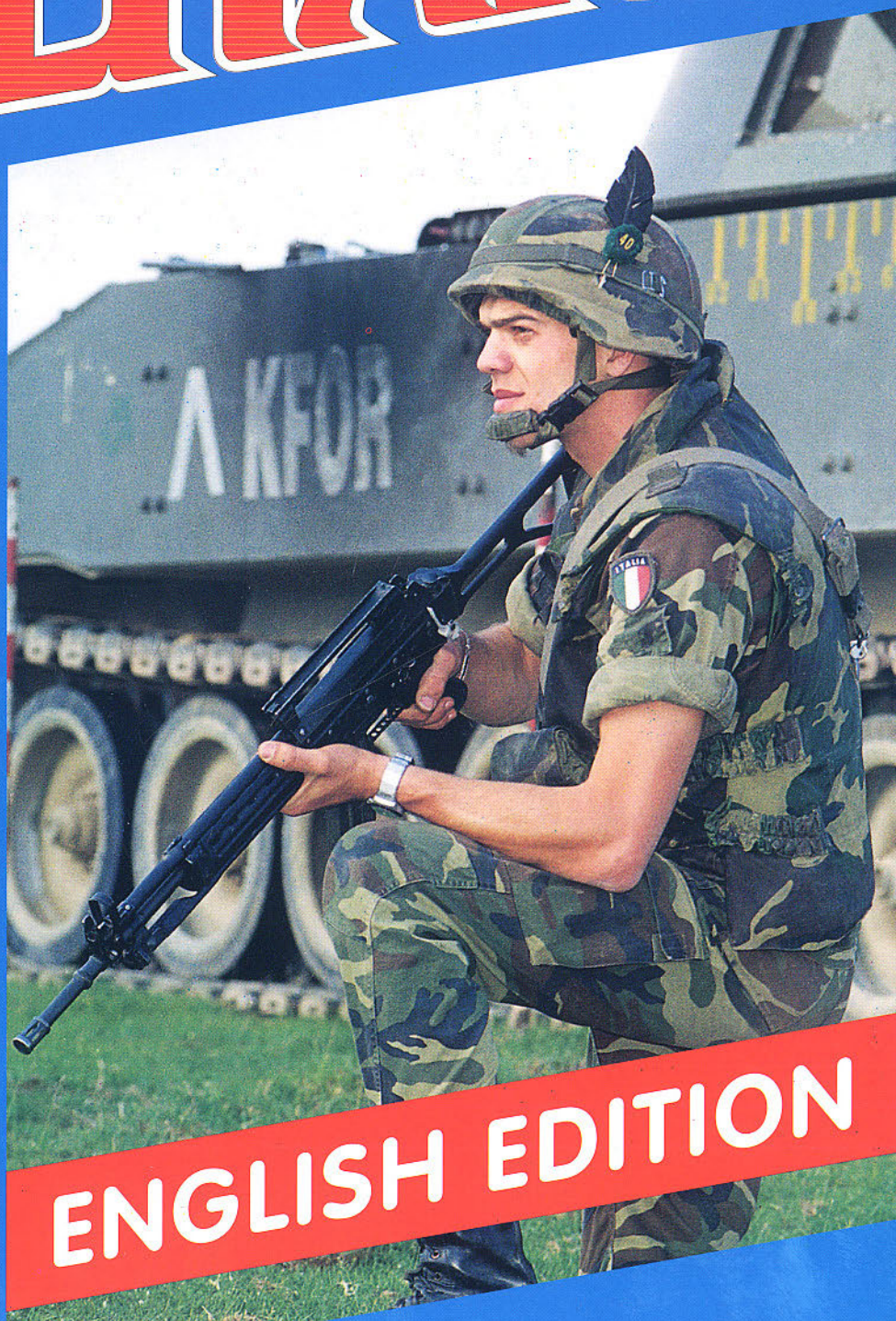
Spedizione in
abbonamento postale
comma 34 art. 2
L. 549/95 Roma

**THE ARMY FOR EUROPE
AND FOR THE COUNTRY**

**SHARING OUT
THE ETHER**

**INTERVIEW WITH
THE CHIEF OF STAFF
OF THE
SWISS ARMED FORCES**

**INTERVIEW WITH
THE CHIEF OF STAFF
OF THE
SLOVAK ARMY**



ENGLISH EDITION



Rivista Militare
is on INTERNET

Official site

www.esercito.difesa.it



CONTENTS



Number Three 2000
September - October
November - December

Rivista Militare aims at broadening and updating the technical and vocational training of Officers and NCOs. It is thus a means of propagating the military way of thinking and a forum of study and debate. Through the publication of articles of technical and scientific interest, Rivista Militare also aims at informing the general public on the Army and on military issues.

The Army is changing into a professional Service, capable of contributing to the safeguard of the country's interests anywhere, and of interpreting the security needs of the Atlantic Alliance, with a main role in European Defence.

FOUR-MONTHLY

Supplement to numbers 5 and 6 of Rivista Militare Italian Edition

Editor in Chief:
Giovanni CERBO

Management and Editorial Office
Via di S. Marco
0186 Rome
Phone 0039 0647357373
Advertising
Care of the Secretariat
of Rivista Militare
Phone 0039 066795027
Printer

POLITOGRAFIA S.E.A. srl
Via Cesena, 4B
0182 Rome

Photoprocessing
Studio Lodoli
Phone 0039 065898780
Subscription and forwarding
by mail
Law 662/96, art. 2, para 20/c
Conditions for 2000:
The number: Lit. 4,000 - Euro 2.06
The back number: Lit. 8,000 - Euro 4.12
Subscription rates
Italy: Lire 22,000 a year
Abroad: Lire 30,000 a year
Payment must be made on postal account No. 22521009 - SME Centro pubblicitaria dell'Esercito 23/A, Via XX Settembre - Rome Residents abroad may remit payment through bank cheque or international postal order

Authorized by the Court of Rome Order No. 944 of the Registry by decree 7-6-1949

2000
© Copyright by
Rivista Militare

ASSOCIATED TO USPI
UNIONE STAMPA
PERIODICA ITALIANA

The production of this magazine has been supervised by Omero Rampa

Politics, Economics and Strategy

- 2 The Army for Europe and for the Country
The Adherence Logistics
(Claudio Graziano)
- 16 A Revolution in Military Affairs
(Pier Paolo Lunelli)
- 28 Sharing Out the Ether
(Ornella Rota)
- 34 Switzerland. The New Armed Forces
Interview With the Chief of the Swiss General Staff
(Enrico Magnani)
- 42 Slovak Republic. Interview With the Chief of Staff of the Slovak Army
(Enrico Magnani)
- 48 United Europe.
Between Dream and Reality
(Luigi Campagna)
- 56 The Military Instrument's Organizational Problem
(Sauro Baistrocchi)
- 70 International Relations in the New Millennium
(Carlo Bellinzona)

Science, Technology and Training

- 78 Command and Control
The Manifold Aspects of an Acronym and Its Derivations
(Angelo Pacifici)
- 86 The Non-Lethal Weapons
(Giovanni Caravelli)
- 94 A Reserve on a Voluntary Basis
(Luigi Semprini)

Current Events

- 109 Premio Giornalistico Esercito
- 113 Sommaire - Inhalt - Resumen



Instructions for Contributors: Anyone may contribute. To guarantee the highest objectivity of information, Rivista Militare leaves contributors ample freedom, though it does not necessarily share their opinions. The Author is thus solely responsible for the articles which, published unedited and without editorial ties, exclusively reflect his personal ideas. Articles must be original in thought and should not exceed ten typewritten pages. Once the Author receives his fee, he loses all exclusive rights. Rivista Militare may then pass the article on to other publications and EMPA (European Military Press Association) periodicals. Articles should be accompanied by suitable photographs, illustrations, explanatory tables, together with a photograph of the Author, a brief «curriculum vitae» and a ten-line typewritten summary. Rivista Militare reserves the right to change the title of articles and choose the typeface deemed most suitable. Rivista Militare is equipped with a computerized system for phototypesetting and videopaging. In order to make the production of the articles more expeditious, it is desirable that the Authors provide, besides the text on paper, also the diskette with the text files of the article. Any system and type of computer can be used.

THE ARMY FOR EUROPE AND FOR THE COUNTRY THE ADHERENCE LOGISTICS

The possibility of a significant participation in the European Security and Defence Initiative is directly related to the operational credibility of the force "packages" that the Italian Army will be able to supply within a very short time.

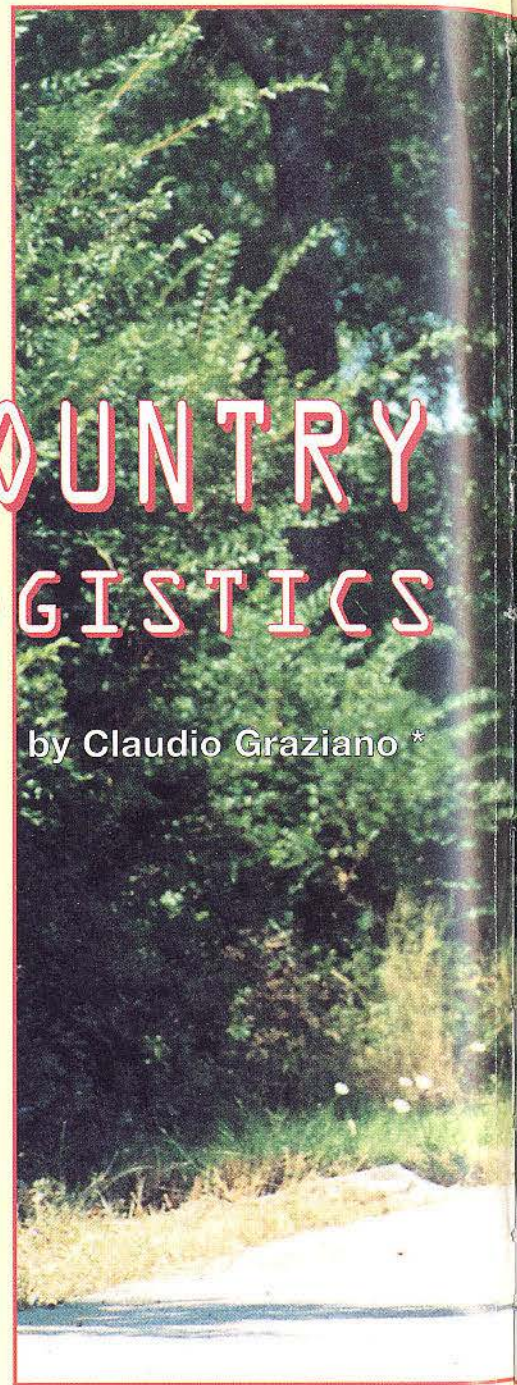
In view of this, the logistic formations tasked with providing adherent support to the operational theatres are as important as the manoeuvre forces, not only to ensure the successful outcome of the mission, but also as a demonstration of the Service's capability of progressively assuming a leading role in the conduct of peace-support operations.

As we mentioned in the articles published this year on "Rivista Militare", the implementation of the project known as "European Security and Defence Identity" (ESDI), especially in the light of the Helsinki Declaration of December 1999, entails a serious review of the development plans of the European military instruments in general, in order to ascertain their suitability to the European directives and to the plans being worked out for achieving

the objectives fixed in Helsinki.

In substance, Europe has decided to acquire, by the end of 2003 - which, in planning terms, means tomorrow - a concrete capability of intervention in operations for the management of the crises included in the whole range of the "Petersberg missions". To this end, the objective is to establish a Corps-level European Force, 50-60,000 strong, with a high readiness-level, capable of intervening and remaining in a

by Claudio Graziano *



theatre for over a year.

As is well known by now, this will imply not only the preparation of a quantitatively and qualitatively adequate "capability pool", from which mission-tailored units will be drawn, but also the availability of an at least double body of forces, at a lower readiness-level, in order to guarantee in-theatre sustainability. Therefore, as far as land forces are concerned, we are talking about a total availability of approximately



200,000 men.

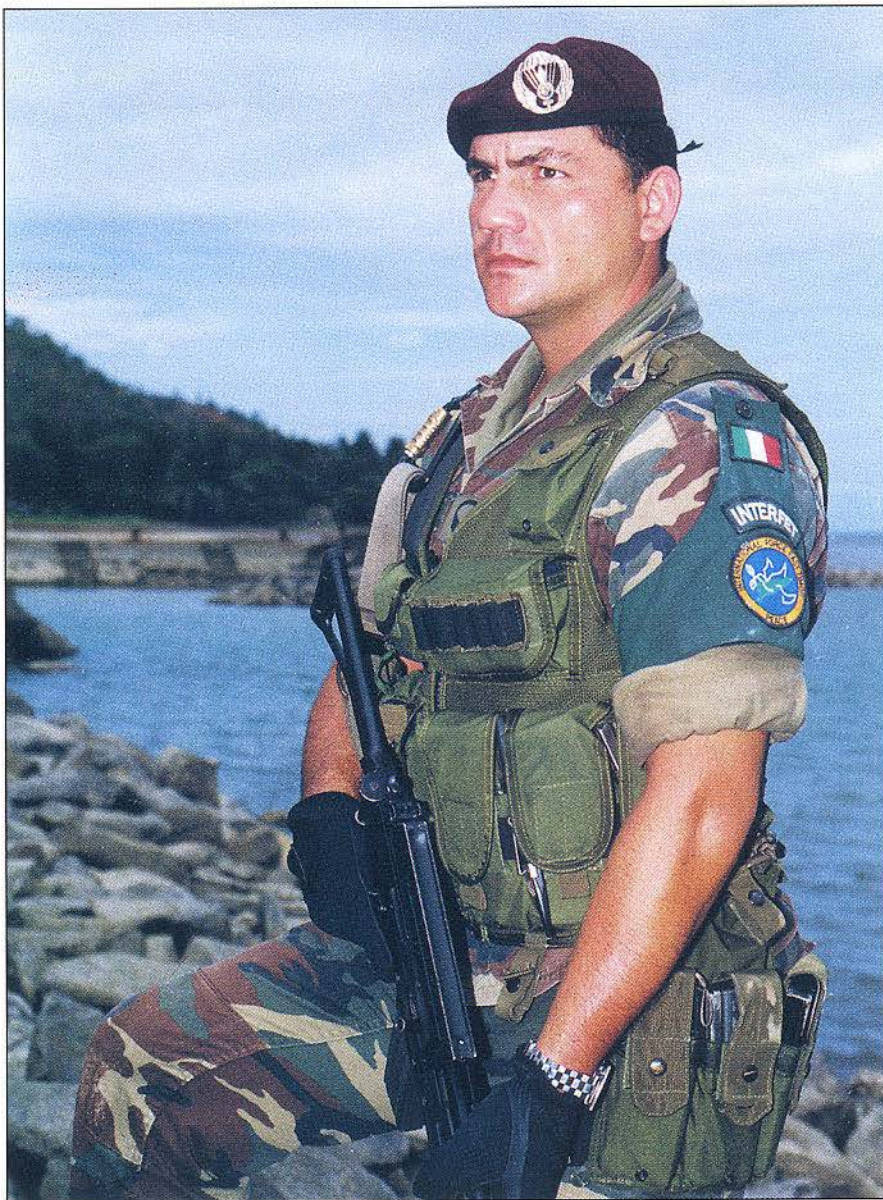
Although it is expected that the European-led crisis management missions should take place only when NATO as a whole is not engaged and, therefore, the possibility of drawing from the assets of the Alliance could be taken for granted, it is necessary not to underestimate the commitment undertaken, which is very ambitious, and not only in terms of quantity.

As a matter of fact, in order to

guarantee that the necessary European operational capabilities are effectively and credibly achieved, the Helsinki project intends to develop the already existing capabilities, both in the national and multinational environment.

Hence, while from now to 2003 the question will be essentially to outline the architecture of the forces, defining and selecting the national capabilities fit to carry out the task among those already

available and ready - and each partner will actually participate in relation to the quality of the packages offered - starting from now, and thinking about future developments, the member Nations which really have the intention of playing a leading role in the process must focus their attention on seven key-sectors, which are crucial for a credible management of crises by the EU. They are, in particular (1): projectability of the forces;



A Paratrooper from the Italian Contingent during the East Timor peace mission.

soon a greater availability of projection capabilities similar to the ARRC ones. At the moment, the requirement is met by two other Corps Commands, although in the future the new operational requirement will probably lead to a global review of the present organization of the Commands available to the Alliance. The general terms are already known, but it would not be correct to anticipate them now.

In this evolving politico-strategic context, Italy submitted its candidacy, made official by the Alliance last spring, as "lead nation" for the constitution in Italy of a Command equivalent to ARRC (3).

In this prospect the Army is developing a project aimed at meeting the new and fundamental obligation, which is an absolute priority for the entire Italian Armed Forces and will bring about the rationalization of the human resources available, in order to ensure the national share of Staff personnel for the framework. Also, suitable structures will have to be found for the Headquarters, and supports made available in their manifold aspects of general support (Hq. Command), special support (Communications and Intelligence), Combat Support (Artillery, Engineers, Air Cavalry), all within the responsibility of the lead nation.

In any case, the numerous evolutionary processes both within NATO and ESDI for the first time need a complete and Euro-Atlantic response to security requirements that have completely changed in the course of the last ten years. Till now, the European nations responded using pre-cold war instruments, hastily adapted to the new scenarios.

The crisis in Kosovo is very significant in this respect, since it affected Europe deeply, hastening

sustainability; interoperability; mobility; flexibility; survivability; Command and Control.

A system of consultations will permit to evaluate the results actually achieved.

Although it was not stated explicitly, it is likely that, in the successive development of the activities, these long-term objectives could become at first, parameters of common reference for national planning and then, real convergence parameters. This would be in line with the course followed in building the first pillar, the economic one, of European integration.

It is easy to note that the acquisition of these capabilities,

made possible by technological progress, but depending on the investment of adequate financial resources, can be linked with the parallel development of NATO's Defence Capability Initiative (DCI)(2).

Also NATO, in fact, for some time has been reviewing its military structure, in accordance with the new Strategic Concept, which indicates the capability of crisis management as one of the fundamental tasks for guaranteeing common security.

As an immediate consequence, and for a better visibility of the Command and Control organization, the Alliance intends to achieve

the pursuit and implementation of a coherent and concrete foreign and security policy. At the same time, the crisis urged NATO to start a critical review of its structures, in order to adapt them to the changed security requirements of the Nations of the Alliance.

Therefore, the crisis in Kosovo has been a kind of second turning point for the West, vis-à-vis the security problems of the post-bipolar era. The first was the period going from the beginning of the collapse of former Yugoslavia to the Bosnian crisis, and showed that the common and collective security systems inherited from the cold war were substantially inadequate to manage complex crises in an effective way. There were the same limitations that, in a completely different situation, had brought about the failure of the peace mission in Somalia. This meant that, since the two conceptual prerequisites of "global security", i.e. "active conflict prevention" and "remote conflict management", had not met with a full organizational and procedural response, it was high time to make radical and innovative decisions.

The turning point took concrete form, first within NATO and then in Europe through the search for new formulas for a more timely and direct management of the security problems, thus conceptually moving, from "peace support" to "active crisis management". Hence, a transition from emergency philosophy to planning philosophy.

The concepts expounded above are not radically new for the Italian Army, which has been engaged for some time in a complex and ambitious process of transformation of the land instrument. If anything, the problem today is that of accelerating the measures and decisions that are considered indispensable but were planned for the medium term. This should be done in order to be able to decorously participate in the process of realization of the European Forces. At the same time, we are waiting for a final decision on the

transition to fully professional Armed Forces, an issue on which a lot of work has already been done, but whose most important element is missing: the final dimension.

In this sense much has been accomplished, and much more will be done in terms of capabilities relevant to the various operational functions, but obviously the manoeuvre forces are only a component, probably the most visible but not necessarily the most important, of the future European Forces.

Italian and French servicemen in a joint exercise.



Furthermore, the possibility of assuming a more important role within the Alliance and the EU does not lie only in the manoeuvre Brigades which may not be perfect but exist, are deployed in all the European theatres of crisis and, after all, have always behaved honourably. Consequently, the Italian participation, with combat forces, is indisputable. But, in order to be among the nations whose credibility entitles them to assume the "tactical" responsibility of the mission (ARRC level), the problem also, and mostly, concerns the nation's capabilities in Combat Support and Combat Service Support.

Thus it should be made clear, and not only to the laymen, that the expression "manoeuvre forces plus appropriate tactical and logistic supports" does not "dispose" of the latter as a secondary component. If we look carefully, we can see that most of the contents, both in the convergence parameters and in the DCI, refer more to the supports than to the manoeuvre forces.

The so-called "Support Groups", therefore, are not only an important part of the operational component but also a large one and, perhaps, the costliest and determinant for the land instrument as a whole.

This said, the term "Group", which indicates something more

than a Regiment, indeed appears to be reductive, since it refers to capability-reservoirs which include units for special support (communications and Intelligence), tactical support (Artillery, Engineers, Air Cavalry) as well as adherence logistics. In this sense, the Group Headquarters are real support Brigades. They are in fact equivalent to Brigades, owing to their organization and to their great responsibility in the preparation and logistic-administrative management of the units. Furthermore, these Commands:

- concur in the completion of the Major-Unit Commands designated for a mission,

providing specialistic Command and Control modules (4);

- are the most important contributors of forces to the Corps Framework Headquarters made available by Italy, and to any other Italian-led Theatre-Command, as is the case in Kosovo.

Besides, some of these Commands (certainly the Logistic and Artillery ones, less likely the others), must assume a complete projection-capability if more Brigades are simultaneously engaged, within a national framework, in case of a major crisis.

Let's now turn our attention to the logistic support of the forces projected or, if preferred, to the logistic support of the "Division for Europe".

THE ADHERENCE-LOGISTIC SUPPORT (5)

We mentioned the fact that the political and techno-military evolutionary processes under way require a general planning activity, in order to have an early outline of the structures capable of meeting the requirements deriving from the modern operational scenarios.

The reorganization process of Logistics should also be considered in this context; the process, which

started in 1997 with the first definition of the Capability Packages and Reference Logistic Concept, will gradually take shape with the application of the basic modules of adherence logistics.

This is a model which, being destined to meet the support requirements of the operational forces within the new project of European security, is necessarily projected towards the future, so as to be fitting to, and compatible with, an entirely professional Army. In other words, if the primary task of adherence logistics is that of ensuring support to forces projected outside the national territory, and if the pool of projectable forces will very likely represent the Army's operational dimension, then we need to envisage right now, in this sector, a model as much "final" as possible.

The generation of the new structures is therefore based on the lessons learned from the operations under way, on the considerations about future scenarios and commitments emerging in the multinational environment and, last but not least, on the abovementioned need for Europe to achieve the capability of managing the crises, either autonomously or within the Atlantic Alliance.

The construction of force systems, in fact, is always inspired

by three orders of factors, deriving from:

- **lessons learned;**
- **future scenarios;**
- **international and internal conditions.**

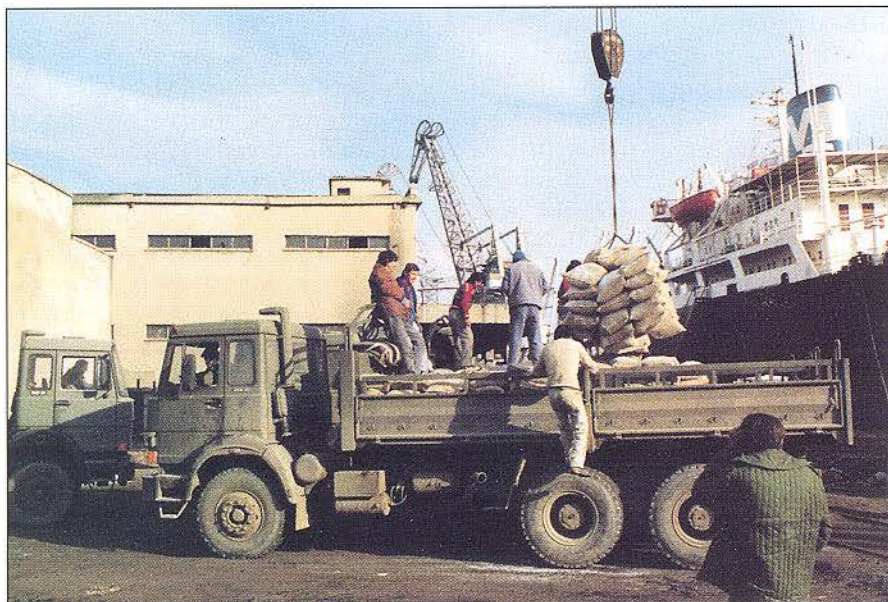
These factors must be appropriately weighed out, in order to avoid, on the one hand, the construction of a theoretical reference-model not suitable for future operations, and, on the other, the reference to "false" future scenarios only partially verifiable, and, finally, to prevent the models from being incompatible or inadequate to the internal or external conditions.

Owing to this, the construction process of the new systems should be divided into several phases, in order to safeguard the residual functionality of the existent during the transition to something different. But the key elements for success are always:

- the active participation of all personnel involved in the reorganization;
- the common sharing of the aims of the process and of its general and sectorial objectives;
- the awareness that the achievement of the goal will lead to a greater general effectiveness.

THE ARMY'S OPERATIONAL CONCEPT

Let's go back briefly to the well known "Army's Operational Concept" updated in the light of the recent international developments (ESDI and NATO). This concept is a basis also for the approach to the adherence logistic support. In particular, as regards the participation in multinational operations of crisis management, the concept envisages the maximum effort on:



Unloading humanitarian-aid supplies during the "Alba" peace-mission.

- a major Theatre with Division-level forces (Hq and supports) including, among others, two national Brigades;
- two separate major Theatres (as an alternate option to the above), with two Brigade-level Major Units;
- a minor Theatre, where a possible Italian contingent should stay for a short time, with Brigade-level units. The Theatre could also be considered as "minor" because of the reduced level of the national Force (combat group, staying for a medium-long period of time).

The first two options are alternative, and imply their "sustainability" for more than a year; consequently one should keep enough forces to guarantee the rotation (on a 3 or 4 basis) of the units employed outside the area, according to the most onerous hypothesis. Besides, the engagements deriving from NATO Planning must also be considered as alternatives.

THE LOGISTIC REFERENCE-MODEL

Many experiments were started during 1999 which are still under way and, albeit necessarily partial vis-à-vis the theoretical model envisaged, they gave a first validation to the logistic reference-model. In particular, the following elements appeared to be meeting the support requirements of the units, both in the preparation phase and during the conduct of "out of area" operations:

- the logistic instrument, with the presence of specialistic bodies, both in the support area and in the adherence area;
- the Great Base;
- the Command and Control



system for the military management of bodies and assets of the two logistic levels (adherence and support);

- the procedures for operation and interconnection of support and adherence;
- the scheduling of the logistic activities;
- the high specialization of the logistic units.

We shall go back to these elements. But we can say right now that, as was easy to expect, many lacking sectors emerged. Further improvements will be necessary in order to put the model in good working order. In particular, the most wanting sectors seem to be:

- **computerization**, which needs a higher level of diffusion, both as regards the computerized C2 systems and the technologies connected with the computerized management of supplies;
- **logistic programming and planning at the various organizational levels**; it requires not only effective procedures, but also the acquisition a planning-oriented mentality at every level;
- **allocation of resources for specific operations, at least as regards informatics and C2**; this is the supporting pillar of any logistic manoeuvre, by which those in charge are enabled to

know in real time whether the necessary materials are available.

THE LOGISTIC AREA OF ADHERENCE

Taking into account the main task of adherence logistics (i.e. to support national contingents engaged outside the national borders), the organizational model to be achieved considers measures to be taken both in the Command and Control sector and in that of logistic units. In particular:

- in the Command and Control sector:
 - upgrade the Command of FOTER's Logistic Supports, in order to enable it to manage the logistic units both within and outside the Country, in case of employment of more than one logistic unit in the same theatre;
 - establish two types of logistic Regiments, obtained through the upgrade and rationalization of the existing logistic formations: one will concern transport and management of the transit logistic-area (RELOTRA), and the other will deal with maintenance and supply, in the wider meaning of the terms (RELOMA). Both types of Regiments will have to be able to assume the role of



Italian soldiers patrolling a wood in East Timor.

"Adherence-Support Group Command" (GSA) in the operations zone.

- in the other sector, the issue will be to assemble the capabilities, into battalion level mono-function units, with capabilities of transport, management of the Transit Logistic Area and maintenance, supply and development of the medical activities.

ORGANIC UNITS AND EMPLOYMENT FORMATIONS

The basic element of the organizational transformation is thus the transition from polyfunctional logistic units, coherent with a threat whose size and origin is known in advance, to "logistic-capability packages", i.e. containers from which the most

appropriate capabilities can be drawn in order to accomplish a specific mission in a given operational situation (mission oriented). Therefore, the new Regiments will be organic units and not employment formations, signifying that the RELOTRA or the logistic manoeuvre-Regiment will never be employed in their entirety in operations. As a consequence, an employment unit can be described as a contingency formation, based on a "framework" structure taken from one of the logistic Regiments. Its denomination will be "Adherence-Support Group", and will draw the necessary capabilities on a case-by-case basis.

THE ADHERENCE-SUPPORT GROUP

The organization of the Adherence-Support will be as follows:

- **Commander:** the Commander of RELOTRA or RELOMA, appointed for the specific need. He will also be the logistic Commander of the contingent, when the land component is at Brigade level;
- **staff structure:** the staff of the RELOTRA or RELOMA engaged in the operation;
- **Hq and Logistic Support Company:** the corresponding company of the RELOTRA or RELOMA concerned;
- **basic employment units** (companies and/or platoons): taken from the abovementioned Regiments, in relation to the mission;
- **specialistic modules:** also drawn from the assets of support logistics.

As we can see, the GSA does not have a standard composition but, thanks to its modular nature, will be strictly adjusted to the structure and task of the Major Unit it has to support. Figure A shows a GSA fit to support a standard Brigade. Anyway, at the moment there are other structures with different organizations; suffice it to mention the GSA-Bosnia (battalion level), or the support of the "Cuneense" combat group, whose organization is at company level. The logistic Regiments, therefore, must be capable of producing different GSAs, according to the mission.

OVERALL CAPABILITIES TO BE ACHIEVED

Having described the level of aggregation of the capabilities and the standard structure of the contingency unit, let's try now to summarize the overall capabilities needed by the Service for the accomplishment of the missions/commitments fixed by the updated operational concept.

In the sector of crisis management, in general terms, the requirements are:

- 3 GSAs for the sustainability of a Brigade in a Major theatre (on a "base 3" rotation);
- 3 GSAs for the sustainability of a Brigade in a second major theatre;
- 2 GSAs for the sustainability of a contingent in a minor theatre, or - through the generation of battalion/company-level NSEs - of multinational forces similar to the "Cuneense" contingent or the MLF (Multinational Land Force - Italo-Slovenian-Hungarian Brigade).

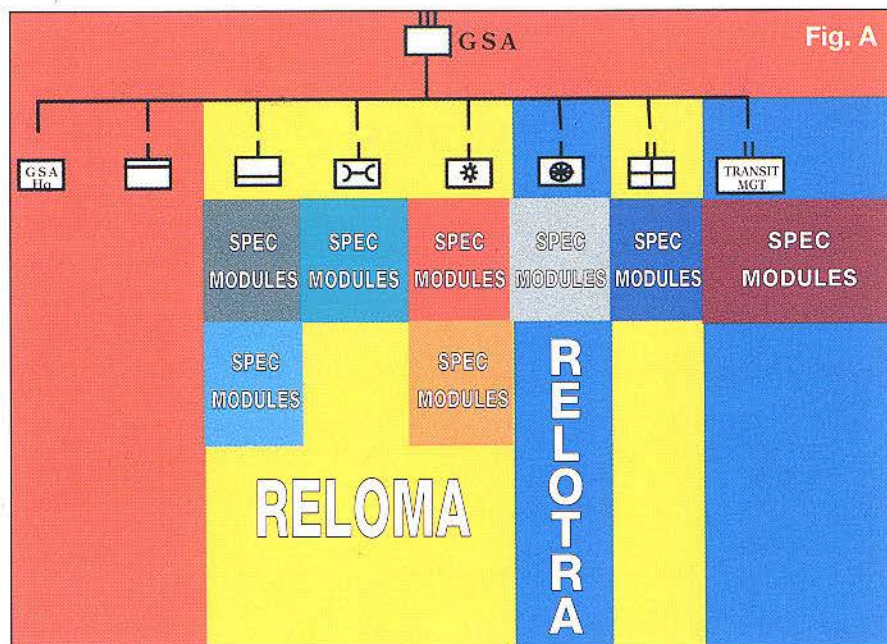
Moreover, the total number of 8 GSAs can be considered adequate to the options of employment envisaged by the Army's Operational Concept (participation in the Alliance's reaction forces within Art.5; defence of the national territory).

On the basis of the operational requirements, and taking into account the envisaged procedures for the rotation in the two major theatres, the instrument's size fixed in the "Logistic Reference-Model" (Ed.'99) can be fully confirmed, since it called for a total number of Regiments equal to:

- four, for the so-called transport component;
- four, for the so-called manoeuvre-logistic component.

The modular nature of the regimental structure, and its ability to generate GSAs with different logistic capabilities, is made possible by the functional organization of the unit, based on flexibility. Therefore, three main components will be present: elementary modules, operational modules and elementary employment units.

The **elementary module** is made up by a system (weapon/vehicle) and the minimum number of personnel - with their own leader - trained and equipped to operate the system. It is structured in such a way as to carry out elementary actions within an **operational**



module: the platoon. The organization of the elementary module is therefore closely connected with the characteristics of the system and its function. It expresses only partial capabilities and, therefore, is not suited for operating alone, except for activities of limited operational and technical value.

The **operational module (platoon)** results from the association of two or more mutually-supporting elementary modules, that could also be dishomogeneous. Its structure permits to carry out a tactical action (or task), limited in time and space, or to repeat tactical actions and tasks of a cyclic nature.

The aggregation of a certain number of operational modules originates the **elementary employment-unit: the company**. It is a single-function unit, which can be organized in different ways, depending on the task. It can be employed in:

- **limited-time** activities, with the simultaneous employment of all the operational modules available;
- **protracted activities**, taking turns with similar units, or through the rotation of its operational modules.

The elementary employment-unit

does not have its own logistic capabilities, but its Command and Control organization is capable of managing the "ad hoc" support capabilities assigned to it, medical service and food supplies in particular.

Command and Control of more than one company is entrusted to the **battalion**, which is structured to exercise the **tactical control** of the units employed on the basis of the plans and programs worked out by the regimental staff.

The **autonomous Regiment/battalion, when constituted in view of specific missions**, is an employment unit capable of entirely carrying out a whole specific operational function. It has Command, Control and Communications capabilities, as well as logistic-support assets, suited to the tasks.

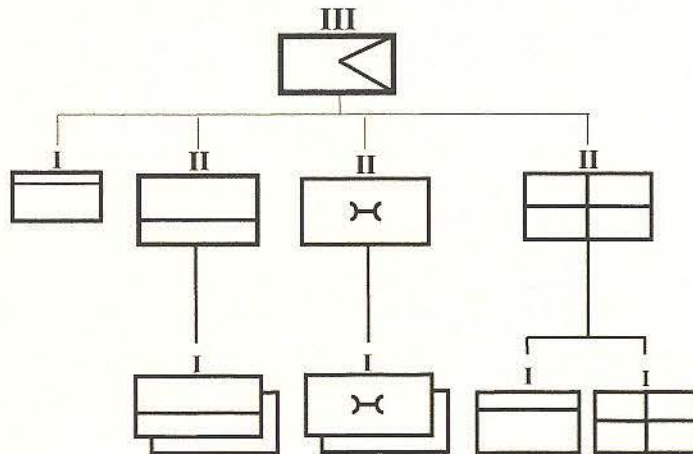
The structure and tentative organization of the elementary modules of employment, together with their level of aggregation into elementary units, are shown at Fig.B (RELOTRA) and Fig.C (RELOMA).

LOGISTIC COMMAND OF FOTER'S PROJECTION

A consequence of the envisaged

Fig. B

LOGISTIC MANOEUVRE-REGIMENT (RELOMA)

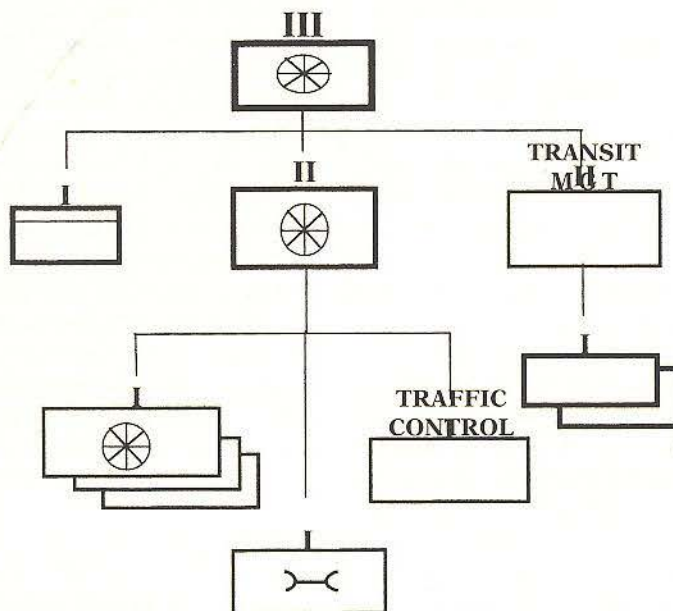


- transport-credits;
- the contribution to the units in preparation in order to meet their possible requirements as regards transportation and/or specialized bodies;
- support to the units engaged in operations;
- support to the units engaged in important national or international exercises.

Furthermore, FOTER's Projection Logistic Command will have to provide - **if necessary** - specialized personnel to the functional areas of projected Brigade and Division Hqs engaged in important operations or exercises. Besides, COMLOG will have to be able to set up the Theatre Logistic Command in case of operations envisaging the presence of more than one GSA in the same theatre.

Fig. C

LOGISTIC TRANSPORT REGIMENT (RELOTRA)



centralization of the adherence-logistic units within the operational forces is the need to adequate management capabilities, both on the national territory and in "external" operations. This requirement will be met through the transformation of

COMSUPLOG into FOTER's Projection Logistic Command, whose task will be to coordinate:

- the preparation and training of logistic units;
- the contribution, in terms of capabilities, to the Logistics of Support, in the shape of planned

THE GSA STRUCTURE

The GSA will have to ensure the management of the command/management/executive bodies located both on the national territory and in the Operations Theatre. Within this framework the GSA, although its structure is similar to the other Regiments', is organized in a different way, in order to ensure the correct management and execution of its activities.

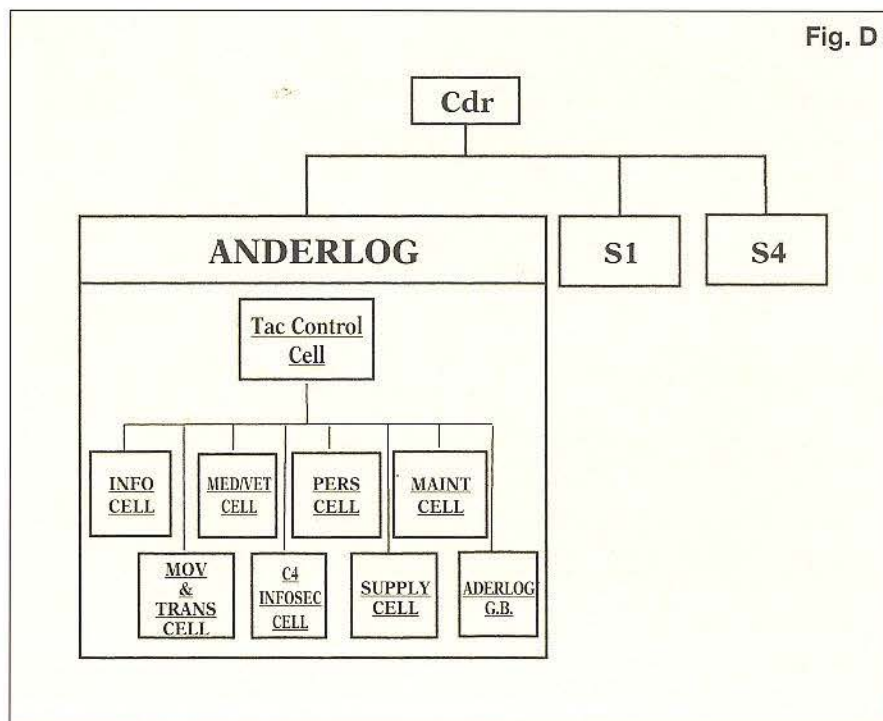
In particular:

- the Hq. of the Regiment (Fig.D), although keeping its functional areas, will be organized, as far as its staff is concerned, as follows:
 - S1 and S4 branches, which carry out activities concerning the Regiment's typical requirements;
 - ADERLOG-FW (forward), which includes specialists of the functional areas (personnel, intelligence, operations, logistics) and an Operations Room, with a Room Head (S3), who is responsible for the tactical control of the activities under way by proxy of the GSA's Commander; and represents the projected staff-component.

- ADERLOG-GB, which is the interface of SOSTLOG (operations room of the Support Logistics set up within the Great Base) and remains on the national territory. It is a very slender working-level structure, which normally does not carry out command or planning activities. ADERLOG-GB is the reference body of ADERLOG-FW in the Country, and ensures the coordination of the special elements remaining in Italy (transit-management battalion; maintenance, recovery and supply teams);
- the transit-mgt bn will be divided into two sections:
 - one, on the national territory, will be heavier in its organization, tasked with the preparation and dispatch of material/personnel to the theatre - according to the priorities fixed by the GSA Commander and received through ADERLOG-GB - and with the collection, and subsequent delivery to the support logistic bodies, of the materials received from the operations theatre;
 - the other section, at the APOD/SPOD, will manage the flow of assets and personnel to and from the theatre.

Furthermore, there will be:

- elementary units for maintenance, supply and transport, located inside the Operation Theatre, according to the mission. Some maintenance and recovery modules could be detached to the transit-mgt bn, to deal with the flow of damaged vehicles and systems. Supply modules could be assigned to the same battalion for controlling the supplies' flow at the Great Base;
- elementary units for traffic management, normally located in the Operation Theatre, could operate both in the AOR of the national Major Unit and in cooperation with the equivalent allied units in the communications zone.



PARTICULAR CASES OF ORGANIZATION OF THE LOGISTIC INSTRUMENT

The location and organization of the logistic instrument, described above, refers to the most likely commitments of the Service in the near future. In these scenarios, the Italian participation is limited to Brigade level, albeit in two separate theatres. But we cannot rule out the possibility of an operation requiring the employment of a larger national contingent, i.e.:

- One Division, with two subordinate national Brigades;
- Two or more Brigades (maximum five), organized within ARRC, and therefore operating in a single theatre.

The support to a Command and Control capability comparable to a national-framework ARRC has not been planned yet.

In one of the abovementioned assumptions, the support to the entire national contingent could not be ensured by one GSA only.

Therefore, the number of GSAs depends on the organization of the operations theatre but, as shown at Fig.E, it is necessary to ensure at

least a coordination function for the simplest case (one Division with 2 Brigades), going up to an outright Theatre Logistic-Command, when there are more Brigades within the ARRC's multinational Divisions, or when an Italian-led ARRC is activated. However, the development of these functions will be entrusted to the FOTER's Projection Logistic Command, once it achieves its final organizational structure.

In case of an Italian-led multinational Corps capability, the FOTER's Projection Logistic Command would be called upon to activate the specialistic component of the logistic staff.

TRAINING

The adoption of a force organization totally based on the "modularity of formations", automatically meets the conceptual requirements introduced by the new scenarios but requires, or rather urges, specific training procedures capable of achieving the desired qualitative objective of "force generation". In other words, the "task organization" cannot be



A VM-90P armoured vehicle proceeding over snowy terrain in Bosnia-Herzegovina.

applied “una tantum” when the emergency occurs, but must become a training and employment philosophy for the whole land instrument. This means that the Regiments not deployed out of area, as well as those not in a reconditioning phase, must be permanently on training, and the GSAs will have to be operationally controlled by the Brigades, on a rotation basis. This principle should also be applied to the higher level in conceiving the projection staffs (Planning Commands, without permanently subordinate forces), which will be cyclically responsible for the operational control of the non-projected Brigades. As a first approach, the logistic units could be trained through the application of the following general principles:

- **participation in important international exercises:** the GSAs must apply the same procedures envisaged for “out of area operations”. Likewise, one should consider the important national exercises as internal-projection operations. On the other hand, these exercises represent possible future scenarios, considering the constant reduction of the land instrument, which could entail the internal projection of units for presence and surveillance operations;
- conduct of exercises typical of

the **logistic units**, also through the deployment of GSAs or parts thereof but possibly always under the operational control of a Brigade;

- **“ad hoc” training activities**, in order to keep the specialistic capabilities of the elementary units, by carrying out tasks on the national territory, planned on a yearly basis, permitting - albeit in a limited measure - to perform the activities related to transport, maintenance and supply to units and organizations. For instance, these activities could concern the maintenance of a portion of the damaged assets returning from the theatres and concentrated at the Great Base.

During the phase of preparation for a specific operation, the GSA will obviously be asked to carry out, at the appointed “staging area”, the activity of amalgamation with the Major Unit to be supported.

Also the logistic units, like all other operational units of the Army, will have to undergo a periodical “control” of their operational capabilities. This activity, for which the future Inspectorate for Specialization Training will be responsible, will end with the issue of a certificate of operativeness to the unit examined.

In case of a negative result, the unit will be declared temporarily

unfit for operational employment and will follow a specific training cycle for a certain period, which will end with a new verification of the unit’s operational effectiveness.

REQUIREMENTS’ PLANNING AND PROGRAMMING

The lessons learned from the recent “external” operations confirmed the need to realize a correct cycle of planning-and-programming of the requirements, without which logistics would work only on request and not on the basis of previsions, thus thwarting the very essence of the Logistic Reference-Concept.

In particular, it must be remembered that, excepting the needs connected with specific preparations:

- the Command of the force is responsible for the planning activities. The Command of the GSA is a technical body, and contributes to specialistic planning (which comes after the operational one) and certifies the feasibility of future operations;
- the programming activity concerns all equivalent Regiments, with particular emphasis on the GSA, which must produce a synthetic program of the activities of every unit of the contingent.

Considering what we have said so far, we can define:

- **planning**, referred to the accomplishment of an operational task or mission, as the definition of the Commander’s logistic decisions, expressed through the decision-making and planning process;
- **programming**: the definition of the action that must be carried out in order to achieve the objectives and meet the needs

emerged during planning.

The data deriving from the activities described above are used for:

- **planning:** by the support logistics, in order to “destine” the necessary resources to the specific requirements, or to update the resources already assigned;
- **programming:** by the adherence-logistic bodies present at home, in order to adjust the flow of supplies to the theatre in relation to consumption, drawing the necessary assets from those assigned by the support logistics for the specific requirement, on the basis of the updated provisional data;
- **verification** by COMFOTER, responsible for the correct supplying of the Contingents.

In particular, plans must avoid the occurrence of unjustified peaks in the flow of supplies.

“ON CALL” AND “SPECIAL” SUPPLIES

Despite the most careful and detailed planning, changing situations can bring about conditions capable of rendering inadequate the global resources available to the contingent. In particular, this could make the

mission “impossible” to carry out, because of the insufficiency of the contingent’s own capabilities, i.e. assets and weapon systems, and of the resources available, i.e. supplies.

Owing to their different nature, the two requirements lead to a composite procedure of intervention, which envisages:

- **decision on merits**, regarding the modifications in the additional assets needed by the contingent for accomplishing its mission, or remodulation of the operation;
- **start of the supply procedure**

for levelling “non programmed” requirements.

In particular, the “non programmed” requirements lead to the start of two different procedures of **special supplying**:

- **adjustment**, when the shortage is due to the non-correspondance to the real conditions of employment of the assets. This activity follows the passages envisaged for planned supplying;
- **on call**, when the supplying is necessary for the timely accomplishment of the mission.

Owing to their particular nature, “on call” supplies are an exception, also because of their heavy impact on the transport chain, particularly from the strategic point of view.

As a general rule, “on call” supplying will have to go through the following steps:

- direct request by the Regiment concerned to the GSA (ADERLOG-FW) which, if the assets are not available in the theatre, forwards it to its

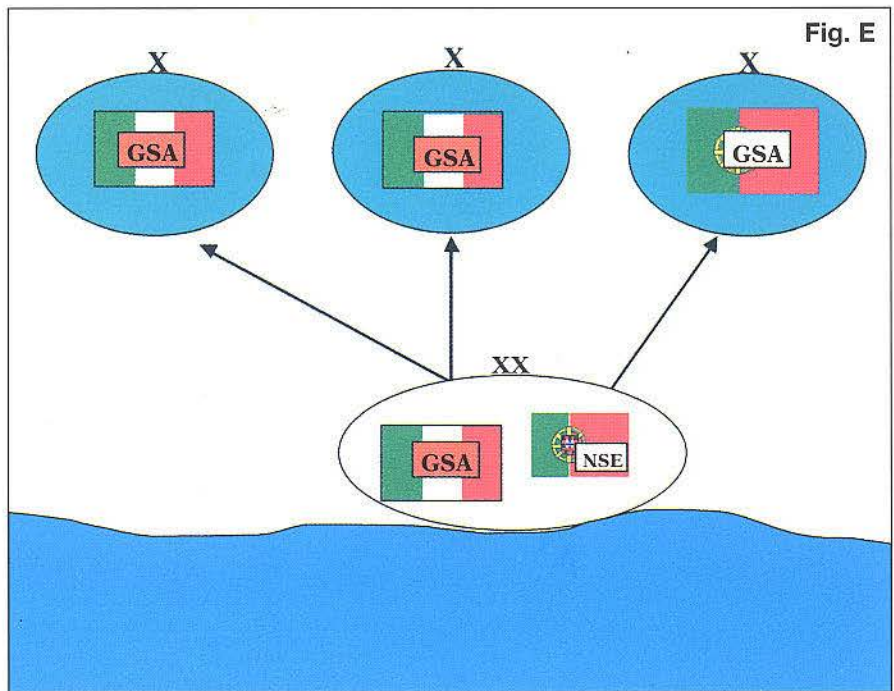


Fig. E



Soldiers from the Italian Contingent distributing food to the Yugoslavian population.



Italian soldiers with a VM-90 on patrol during the peace-mission in East Timor.

ADERLOG-GB;

- real-time transmission of the request to SOSTLOG (co-located with ADERLOG-GB), which checks whether the items are available on the national territory or must be procured;
- delivery of the material to the transit-management battalion (Italy) and immediate notification to ADERLOG-GB;
- swift shipment, and notification, to both ADERLOG-GB and the recipient Regiment, that the requested items have been sent to the theatre;
- "home" delivery of the material.

The policy of "on call" materials, intended as the number of hours fixed for the in-theatre flow of materials, is set up by ISPEL and FOTER, on the basis of the operational situation.

The "on call" policy is therefore a dynamic one, and cannot remain stable for a long time, since it is closely connected with the operational requirements. This aspect is particularly important in case of employment of strategic aircraft, which imply costs that could be redeemable only for the fulfilment of operational

requirements capable of conditioning the operations under way.

COORDINATION ACTIVITIES AT THE GREAT BASE

The Great Base is not a real logistic body, but rather a container of control and execution capabilities typical of the two logistic areas. Within this framework, the Great Base should not be considered as another intermediate command, but as an interface where the logistic - support area and the adherence area can interact, both for the solution of problems and to optimize the activities connected

with the support of out-of-area contingents.

Until the computerization of logistics reaches an appreciable diffusion, both ISPEL and FOTER, in the course of operations, must have at their disposal procedural channels capable of giving prompt and effective responses to the coordination needs, deriving, for instance, from the request of critical materials by forces deployed in different theatres. In this case, just as an example, SOSTLOG - by ISPEL's delegation, and taking into account COMFOTER's binding opinion - will organize the shipment of materials only to the highest-priority theatre (or theatres).

CONCLUSIONS

Till today, but perhaps we could say "yesterday", logistics, in international missions, was considered a national responsibility. More and more frequently, and in numerous highly competent fora, many experts put forward the idea that this is a very old conception. There is no doubt that the complete integration in



"Mangusta" A-129 helicopter flying at low altitude.

A "Camillino" VCC-1 armoured vehicle at an Italian checkpoint in East Timor.

multinational contingents can be achieved only in the long term, and after the general integration of the security instruments. But, on the other hand, the need for coordination, especially when transport assets and supply routes are scarce, becomes more and more pressing. Besides, particularly within a multinational contingent, any shortcoming in the support of a component could cause a sharp reduction in the operativeness of the entire system. Therefore, all partners have the right to insist on the good operation of the various organizations. Furthermore, in order to achieve at least the indispensable interoperability, the organizations may continue to be different, but not too different or, to put it better, they should be as similar as possible. It is not by chance that, when an allied nation adopts certain measures in this sector, the others ask for clarifications and details, in order to get ideas and borrow initiatives but, certainly, mostly to understand and be aware of the problems.

All this is multinational integration, an example for the future of the Italian Army, to which our resources, both institutional and personal, will have to be devoted.

□

* Colonel,
Chief, Plans Office,
Army General Staff

NOTES

(1) See the article "An Army for Europe" - Rivista Militare, Eng. Ed., no. 1/2000.

(2) The "Defence Capability Initiative" (DCI) aims at giving impulse and



incisiveness to the process of renewal and modernization of the Alliance's military instruments. In particular, DCI intends to strengthen the projection capability of the European Armed Forces, as well as their ability to face new risks, especially through the reduction of the technological gap with the United States. The initiative covers five areas:

- **mobility;**
- **sustainability;**
- **effective engagement;**
- **protection of forces and structures;**
- **command, control and information;**

and is linked to the realization of 58 "items" or "sub areas", concerning both the technological aspect of materials and the

cooperation capability of Commands and Units. In this sense, the "Initiative" helps to increase the contribution of the European allies to the global efforts of the Alliance and permits to acquire autonomous capabilities, as a premise for a "European" management of crises.

(3) See the article "The Army for Europe and for the Country. The Command and Control Architecture" - Rivista Militare, Eng. Ed. no. 2/2000.

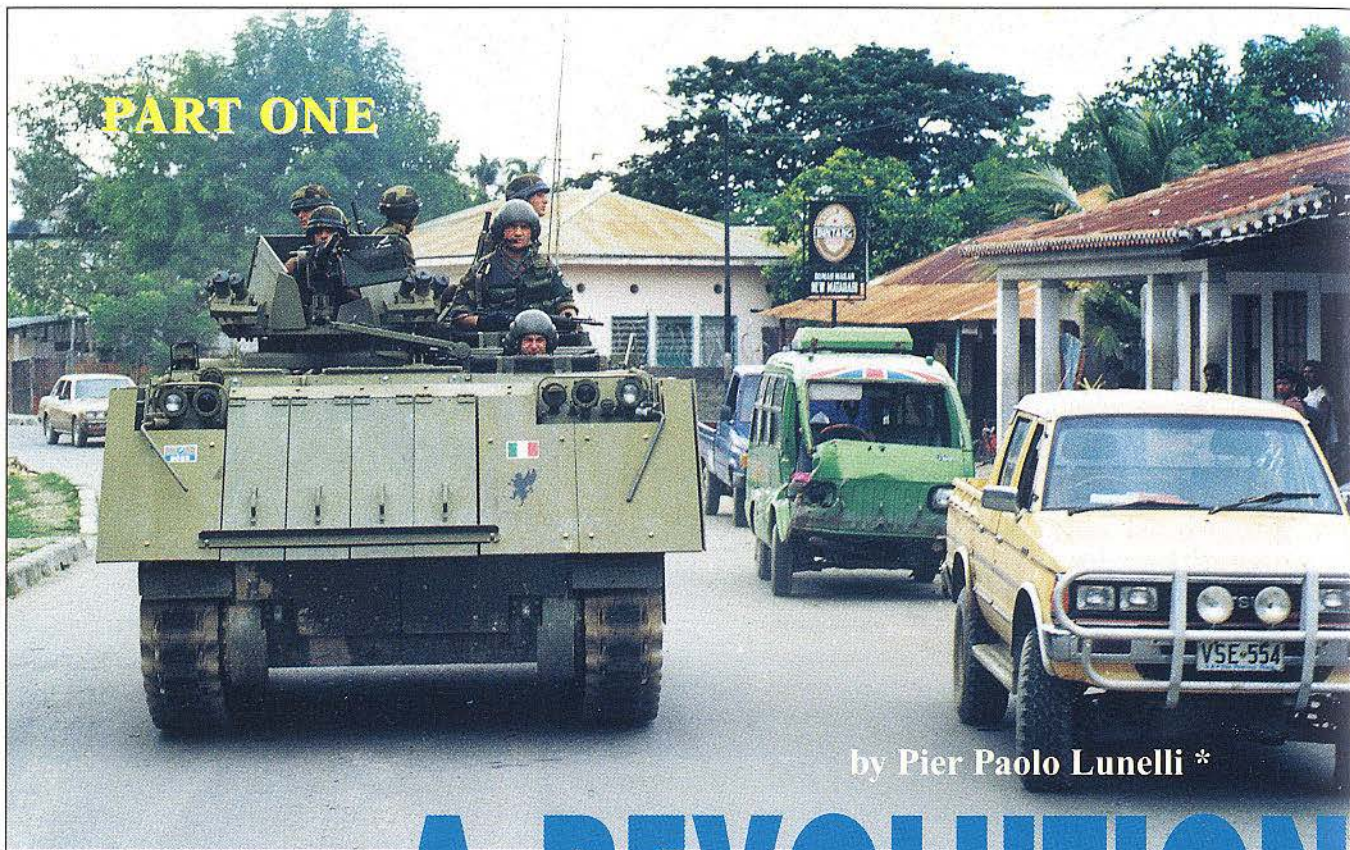
(4) *Ibidem.*

(5) The present article is a development and a deeper study of the subjects discussed in the article "The New Adherence Logistics" - Rivista Militare, Eng. Ed., no. 2/1999.



A convoy of "Centauro" armoured cars in Yugoslavia.

PART ONE



by Pier Paolo Lunelli *

A REVOLUTION IN MILITARY AFFAIRS

The world has become smaller and is controlled by a powerful oligarchy: more than 500 Earth-orbiting satellites are watching us. Facing the prospects of a disquieting future, how should the military organize themselves?

The year is 2015 (1). - Somewhere in Australia the moonless night is terribly dark and cold. The platoon leader, a Lieutenant, increases by a couple of degrees the temperature in the system of his protective suit. His helmet, a concentrate of technology, is equipped with an infrared sighting device, capable of directly projecting on the retina a tridimensional image, together with the digital map of the surrounding area: a psychotechnology based on virtual reality. There is no apparent sign of the enemy, but a locally orbiting unmanned aircraft can provide real-time data on their possible location. "There is

something strange about ten kilometres from my position, but the electronic identification is negative", says the Lieutenant through a cell phone connected by satellite with his Headquarters, located at a distance of about 300 kilometres. "I wait for instructions".

The enemy have run into a minefield. Each mine, of the intelligent type, covers a range of a hundred metres. Through a set of sensors that include radar, infrared displays, acoustic and seismic receivers integrated with software based on expert systems and artificial neural nets, the mines can identify the objective and select the

appropriate response, which could also include the use of a special type of immobilizing foam. Only the friendly forces, identified through an IFF (Identification Friend or Foe) system, can cross the minefield unscathed.

The platoon leader observes his suit, weighing one fourth of the original ones in use several years before. This model adjusts to the colours of the environment: The temperature control is excellent, and so are the transmission, data base and data assembling systems. The laser, coaxial to the individual weapon and interlocked with the infrared sight of the helmet, permits to point the gun without being seen. The system for the production of energy, much smaller than the original, consists of a small cell, rechargeable every two days.

A few moments later, Headquarters orders him to capture the enemy. Initially he considers using a non-lethal gas, in order to reduce their fighting will, but now the wind has risen and that would be unsuitable. The Lieutenant calls the closest airfield and asks for the intervention of a V-22. This is a lightly armoured aircraft which, besides firearms and laser, can also employ a dreadful noise-producing system. The V-22 arrives about one hour later and begins to emit a low-frequency, high intensity directional sound. The enemy try to break contact, but the immobilizing foam discharged by the intelligent mines inesorably stops them, together with their vehicles and equipment. After ten hours of psychic torture the enemy surrender, showing no evident physical damage. The whole operation has been recorded on a computer terminal. Back to the base with the prisoners, the commander can see the action again, make a simulation, verify the effectiveness of the operation and learn the appropriate lessons."

All this is not out of a science-fiction book. On the contrary, it is a

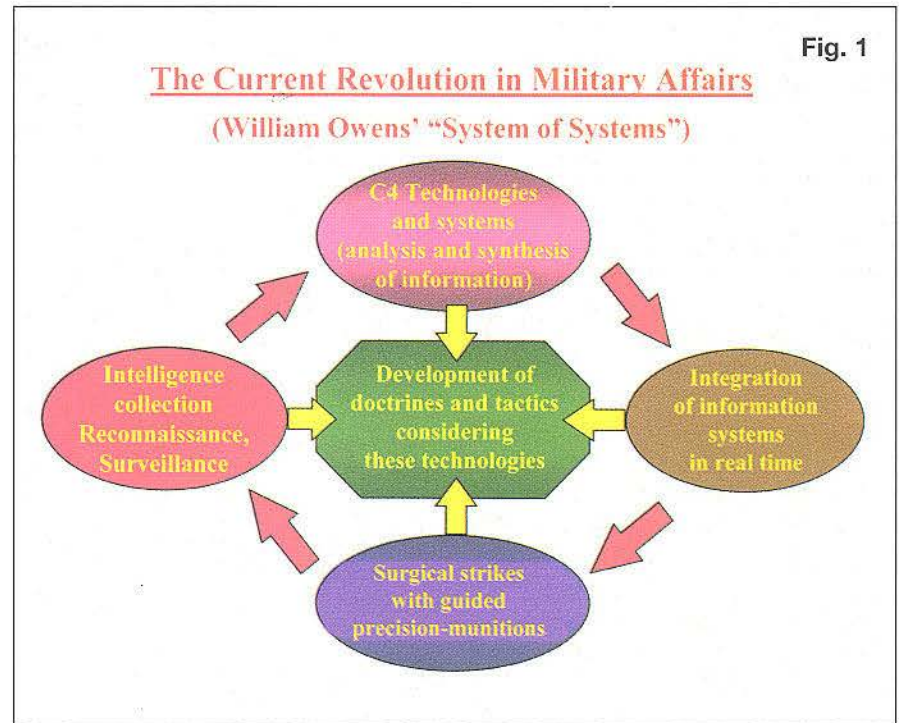


Fig. 1

description of some technologies of the Era of Information, which could be available by 2015 and probably even earlier. According to Carlo Maria Santoro (2), the Institute for National Strategic Studies, which deals with the culture of defence within Washington's National Defense University, has already anticipated the concept of military "revolution". It is based on the strategic challenge that the United States is facing, i.e., transforming the Military Technical Revolution (MTR) into a Revolution in Military Affairs (RMA). In this respect, Santoro says (3): "The Americans are interposing, between us and them, a technologic and intellectual distance of sidereal dimensions, which creates a political and even a cultural power capable of affecting the future of everybody, Westerners included".

This article consists of two parts, and intends to verify if all the emerging technologies can bring about a "revolution in military affairs". With reference to military history, the article analyses how technology has influenced in the past - and could influence in the future - the way of planning,

organizing and conducting war operations.

THE "SYSTEM OF SYSTEMS": IS IT THE PHILOSOPHERS' STONE?

The evolution of the technology of the air, land and naval systems and the improvement of objective-acquisition capability, together with the global connection of the communication systems are already considered by many a real revolution. In particular, Admiral William Owens (4) defines the so-called **Revolution in Military Affairs (RMA)** as the "system of systems", whose main components (Fig.1) are (5): (a) Intelligence Collection, Reconnaissance, Surveillance; (b) Technologies and C4 systems (Command, Control, Communication, Computer) for the analysis and synthesis of information; (c) integration in real time of information systems; (d) "surgical" attacks carried out with Precision Guided Munitions (PGMs); (e) development of doctrines, strategies and tactics that take these technologies into account.

Considering the single components,

no one of them in itself appears particularly revolutionary. Nevertheless their synergic combination could have the characteristics of a real revolution in military affairs. In this regard, it is common knowledge that the US, Great Britain, Canada, France and Australia are studying the military application of the technologies deriving from the era of information and the equipment of the soldier of the future (6).

The military technologies of the postindustrial era are:

- **the development of missiles and devices** with terminal and stand-off guidance capabilities, but also equipped with an objective-recognition system. They will be able to employ a combination of technologies using infrared sensors, radar, patterns and shapes recognition, everything connected with artificial intelligence systems (expert systems, neural networks) and virtual reality. They will be able to decide the best type, moment and place of the attack,
- **high-power lasers**, with high energy concentration, also portable ones, suitable for employment on land- or air-carriers;
- **remote pilot vehicles (RPV) and unmanned air vehicles (UAV)** in various configurations with RSTA (Reconnaissance, Surveillance, Target Acquisition) and precision bombing tasks. They will have a very long range and the capability of transmitting pictures and information in real time, without endangering the pilots' life;
- increase of the **stealth capability** (7), in order to reduce the electronic signature;
- **explosive fluids and cluster bombs** employable by manned or unmanned aircraft;
- **personal weapons** capable of shooting a laser beam instead of bullets;
- development of a technology which, through a digital transmission system, could connect the soldier on the field

GLOSSARY

Antimissile Capability

The antimissile capability is expressed by a defence (carried out with antimissile missile systems) accompanied by another offensive activity envisaging the preventive destruction of the delivery means on the enemy territory. The US provides NATO with an intelligence network based on infrared satellite systems capable of locating the enemy missiles' launching pads and the probable points of impact.

Artificial Neural Net

It is a new-generation, artificial-intelligence technology, which aims at emulating the physiology of the human brain, based on the connection of biological neurons. An artificial neural net consists of a certain number of computerized knots, linked through flexible interconnections (also called neurods). It doesn't elaborate information as normal computers do, but very much like the human brain does, organizing connection models of different weight between their neurods. A neural net learns from examples and from its own errors, i.e. is capable of modifying the weight of the interconnections between neurods. Neural nets are employed for the acquisition of sensorial capabilities (sight, hearing), identification of characters, such as the optical identification of signatures and postal codes; identification of spoken languages; intelligent weapons, such as the guidance of a cruise missile, carried out by comparing the actual flight route with a digitized map; improvement of radar and sonar technology; automatic translation, etc.

Computerization of the Battlefield

This procedure goes back to the origins of alphabetic writing, which cuts reality into letters which by themselves would have no meaning. The first transformation of the alphabet in a digital form was carried out by Morse, who reduced the 26 variables of the alphabet to a code of just three variables (long-short-zero signal) to be employed by the telegraph: The informatic engineers have further reduced the three signals to two (yes-no) The computerization of the battle space envisages the employment of virtual reality, expert systems and artificial neural nets.

Expert Systems

These are programmes for solving specific problems, based on the knowledge of experts and implementation of human processes, such as deduction, inferences, analogies and generalizations. In other words, an expert system is a hierarchical whole of data, governed by routine-type logical procedures (such as: if...then): The shaping process of these systems requires the assistance of experts responding to ad-hoc questionnaires, synthesis of knowledge, selection of the type of representation (frame rules, semantic nets), compilation, codification, verification and validation of the programme. Some applications are: help to doctors in the formulation of diagnoses on the basis of a set of symptoms, realization of certain engineering projects, support to military decision-making.

with a network of helicopters, tanks, and other air, naval and space assets. In particular the self-location system called Global Positioning System (GPS) could be employed universally, with the possibility of preventing the adversary from using it;

- computerization of the battlefield, so as to integrate all the information coming from the various sensors and sources. Artificial intelligence and expert systems will automatically analyse the situation and suggest the possible lines of

Global Position System (GPS)

The system consists of a group of 20 geostationary satellites covering the whole surface of the Earth and a ground installation which can receive data from at least three satellites, determining the coordinates of the objective with an accuracy varying from 100 to 300 metres.

Psychotechnology

It emulates, extends and amplifies the senso-motory, psychologic and cognitive functions of the mind. It includes Artificial Intelligence techniques, expert systems, artificial neural nets and virtual reality. In the military sector, psychotechnologies will allow commanders to manipulate the perceptions and beliefs of their soldiers and also those of the enemy and the TV media.

"Stand-off" Systems

They can be launched from land, naval and air platforms located at great distances from the objectives and are equipped with homing systems. The launching pad is generally at such a distance that it cannot be engaged by the enemy. Classic examples of stand-off systems are cruise and ballistic missiles, and air-surface missiles with homing systems that guide them to their target.

Targeting

It is a process that identifies the enemy objectives and selects the best system to neutralize or destroy them. It is generally divided into four phases: (1) selection of the enemy targets, considering their importance only in view of the mission's success; choice of the best system for locating and attacking the objectives, not only with lethal weapons but also with non-lethal ones, such as SEAD (Suppression Enemy Air Defence and Information Campaign); (3) result to be achieved in terms of destruction, delay of the enemy action or limitation of their freedom of action; (4) assessment of the effects, generally realized with IMINT (Imagery Intelligence) systems.

Virtual Reality

Called by some "Artificial Imagination" or "Artificial Conscience", by analogy with Artificial Intelligence. With Virtual Reality it is possible to create visual, auditory and tactile artificial sensorial inputs. The technical obstacle, which will be overcome shortly, is the insufficient power of computers. Its applications are: identification of voices, high-definition video technologies, tridimensional vision, robotics, flight-course-landing simulations, training, artificial vision, olfactory and tactile simulations optical-fibres technologies, visualization of surgical operations from within the organ, etc. Since it is a technology capable of adding touch and smell to sight and hearing, it is so close to reality that it will succeed in drugging the human nervous system as no other technology has ever done before.

- action to the commander;
- massive employment of **satellites** for targeting activities. It will be possible to utilize such technology, coupled with high-power laser systems, for developing antimissile systems planned to hit in-flight missiles;
- **simulators**, for various employments in individual and collective training, based on the technology of virtual reality;
- **non-lethal weapons** (dubbed soft-kill weapons), particularly suitable for peacekeeping operations, such as adhesive and

immobilizing foams, liquid metal, polymers, superadhesive agents, anaesthetics, devices for producing low-frequency sound, super-caustic acids that can attack metals.

This outline is in itself sufficient to assert that a revolution in military affairs is before us. Nevertheless, before proceeding, it seems suitable to define its domain and essential characteristics.

DEFINITION, CHARACTERISTICS AND CONSEQUENCES OF THE REVOLUTION

As things are, there is no definition for the term "revolution in military affairs": According to Alvin and Toffler (8) a revolution "*...occurs when a new civilization emerges, when society is transformed and the Armed Forces adjust to the new culture modifying organizational structures, strategies, tactics, training systems, doctrines and logistic support...*". In this outlook, Alvin and Toffler point out two revolutions in history. The first occurred with the birth of agricultural society and the second with the industrial revolution. The third is coming.

According to Kreprenevich (9), instead, a revolution in military affairs consists of the application of new technologies which, combined with innovative operational concepts, new doctrines and organizational structures, can modify the efficacy of the military instrument. Kreprenevich, on the basis of this definition, sees ten revolutions of this type as from the XIV century.

We agree with both analysts, considering that the first speaks of "great" revolutions, while the second means a series of "minor" ones, such as, for example, Napoleon's revolution. Anyway, each "minor" revolution is accompanied by a qualitative evolution in the military instrument's

efficacy, a “cumulative” evolution, as clearly shown at figure 2.

On the same subject, Whitaker (10) reminds us that, in the past, technological innovations have produced transformations in the ways of planning, organizing and conducting military operations. He maintains that the most recent ones had already been prefigured by the Soviet military theorists (11) towards the end of the seventies. Whitaker stresses that *“The transformations in warwaging derive from the explosion of technology which brings about innovations in the operational and organizational fields”*.

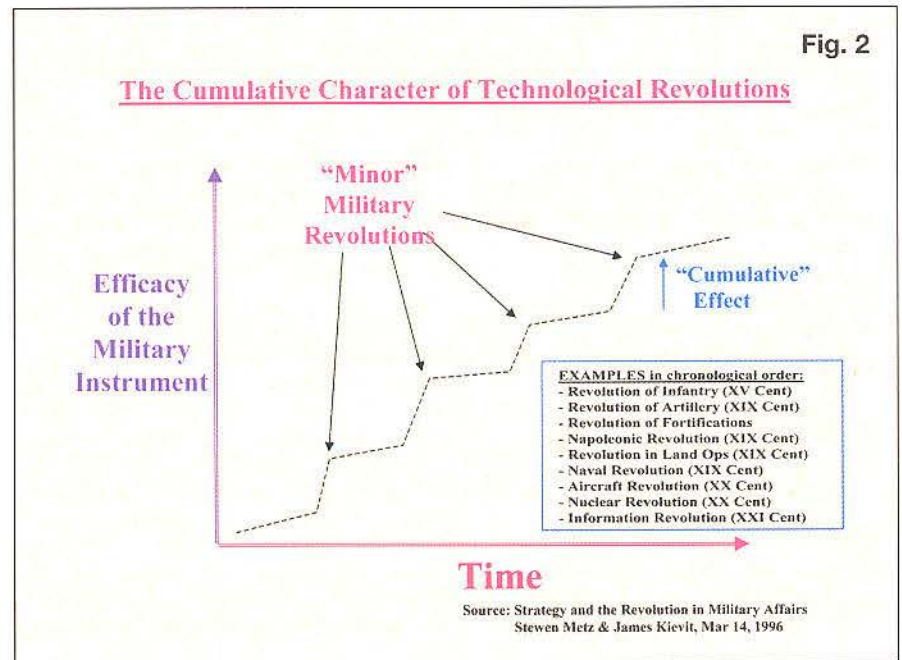
As regards the reasons of this technological explosion we can agree with Tilford (12) when he says that the present Revolution of Military Affairs Information War (RMA-Iwar) is the result of three combined factors (13) (Fig.3):

- the end of the cold war;
- the reduction of the financial resources destined to defence;
- the advent of the information era.

Tilford underlines that, while in the industrial era the main goal was the containment of the Soviet Union, in the post industrial era such objective is embodied by the *Power Projection* in the areas at risk. In this regard, William Cohen (14), US Defence Secretary, states that, in future conflict, it will be impossible to relay on a six-month delay before deploying the forces in a Theatre, like it happened with the Gulf War and, therefore, the concept of employment of the reaction forces must be reconsidered in terms of reaction forces, mobile in a reasonable time.

According to many analysts, the current Revolution of Military Affairs - Information War (RMA-Iwar) (15) has three main characteristics (16):

The first concerns the modification of the relation between accuracy and distance, envisages the employment of precision weapons and will

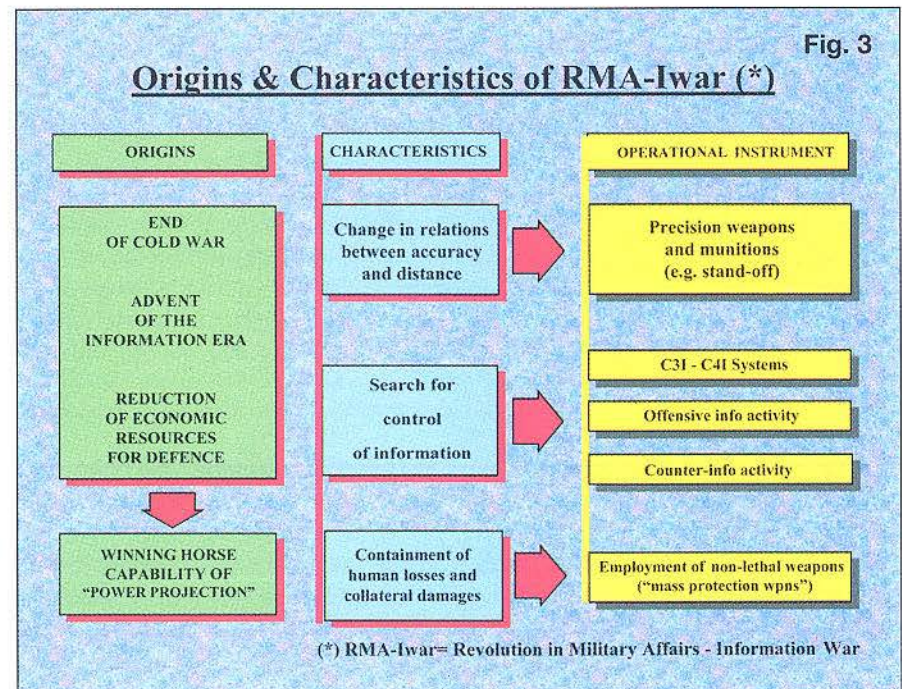


probably be predominant over the other two.

The second is centred on the information war (Iwar), to achieve its control, also through the C3I systems. Information has always been a vital component of military operations, both in the form of intelligence and in that connected with psychological operations. The new frontier of RMA-Iwar, therefore, consists of a massive counterinformation activity aimed

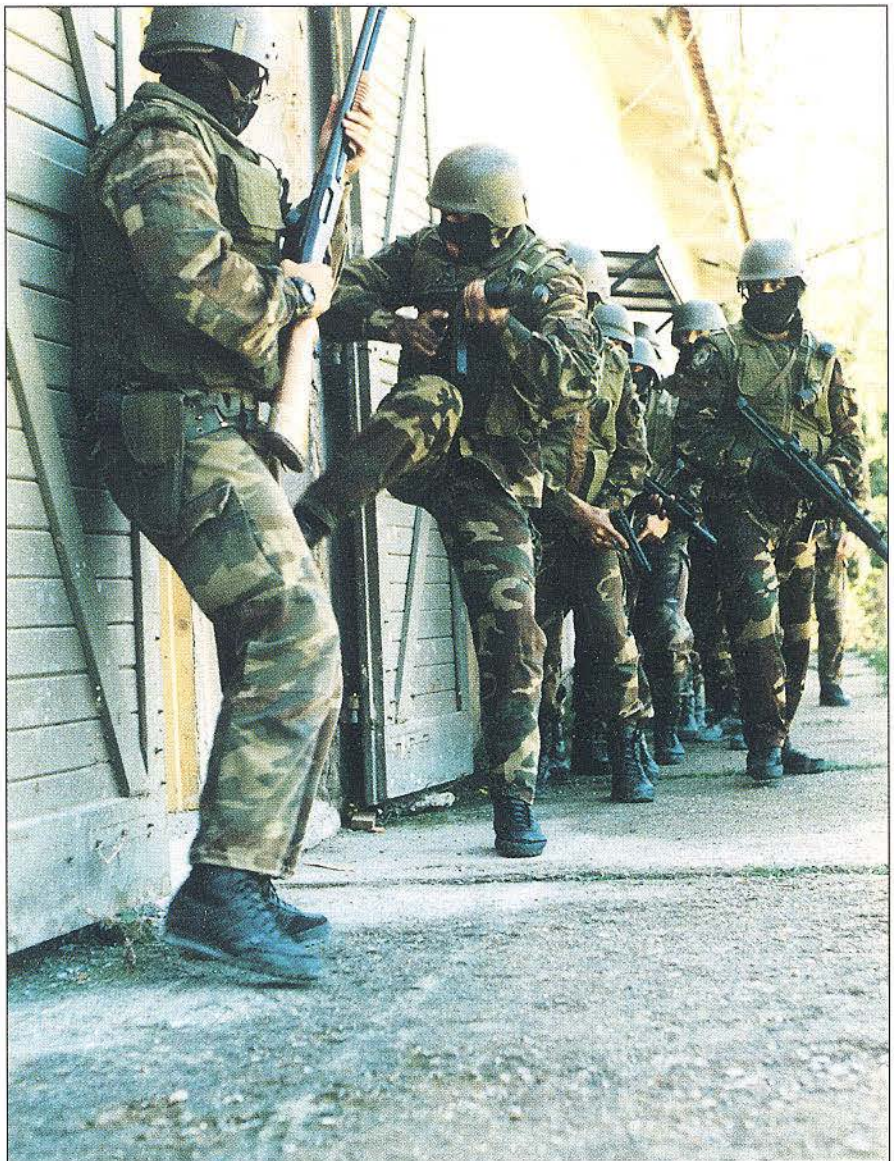
at eroding and destroying the adversary's capability of collecting, analysing, preserving and spreading information, accompanied by an aggressive information activity.

The third and last characteristic of the RMA-Iwar is related to possibility of limiting both the human losses (17) and the collateral damages associated with military operations by employing non-lethal weapons. The instruments for achieving this objective,



paradoxically called "arms of mass protection", will consist of kinetic, electromagnetic devices and non-lethal chemical substances. Such means, destined to reduce to a minimum the impact on civilians and environment, will be deterrent, dissuasive elements used in support of diplomatic actions. Among the latter we can mention lasers, systems for producing low-frequency noise, non-nuclear EMP (Electro Magnetic Pulse), high-power disturbances, smoke bombs, etc. However, their minimum impact on the population and on the environment has still to be demonstrated.

On the organizational plane, Elioth Cohen (18), well-known American commentator, has compared the structure of the Armed Forces with that of big concerns such as General Motors. Cohen maintains that in the fifties the administrative structure of the big companies was similar to the Armed Forces', since both had a pyramidal organization. On the contrary, in the nineties organizations like Microsoft, Motorola and many others were characterized by a compression of the intermediate levels and a great interpenetration between management and work. Despite the impossibility to compare the military organization with that of a firm, owing to different purposes and objectives, Cohen says that also the Armed Forces must continue to restructure themselves in order to get rid of inefficiencies and to stop the growth of activities that have nothing to do with their key functions. Among the most opportune measures, he suggests a better joint approach, to be implemented not only through the elaboration of a joint doctrine, but also through the centralization at high level of some support functions (e.g. the logistic sector), in order to maximize the military



instrument's effectiveness.

Therefore, according to many, the present RMA-Iwar appears as the last born of a family of "cumulative" military revolutions which have followed one another in history until the present postindustrial era.

CLASSIFICATION OF THE REVOLUTION

The classification of the so-called Military Revolutions has not found consensus among the analysts. Among the many interpretations, in our opinion, two of them seem worth mentioning.

In the first, Jonathan Bailey maintains that the XX century has

witnessed only one genuine military revolution, which occurred in 1917-1918, i.e. at the end of the first World War, when, as Bailey says *"...the development of the modern style of warfare was the consequence of the indirect fire of the artillery, because it modified the planning doctrine at the tactical, operational and strategic levels of war..."* This was certainly a technologic revolution, but it was also and above all a **conceptual** one, because, for the first time, it was possible to hit with precision objectives in depth by employing the third dimension. It was, in substance, the concept of **tridimensional war**, which was successively monopolized by

aircraft and missiles.

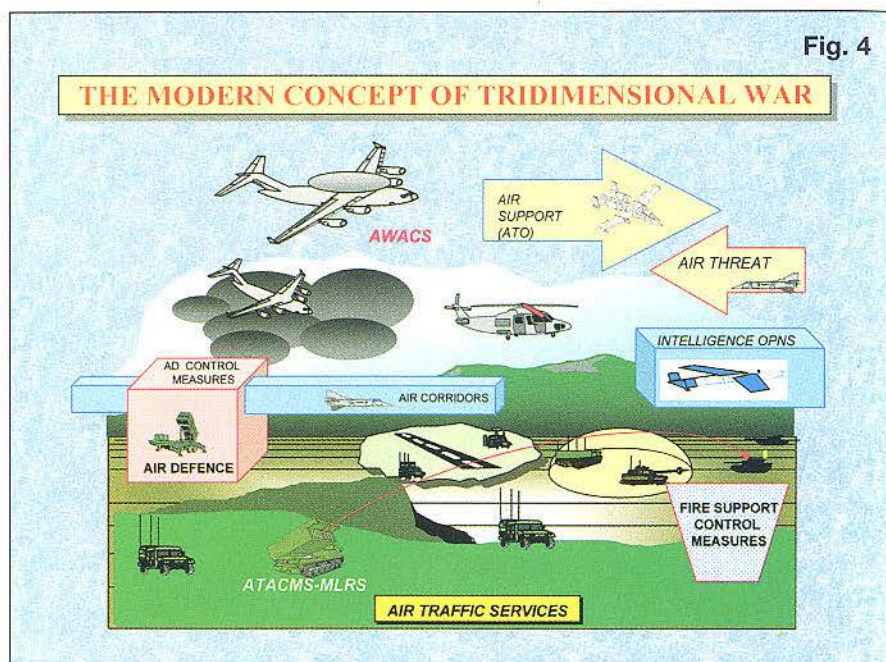
According to Bailey, in 1914 the war had a linear character, in other words it was **bidimensional**. It was based on physical engagement, in which the manoeuvre of the infantry and the cavalry was supported by the direct fire of the artillery, generally deployed at short distance and within optical range of the objective. However, the aircraft, used for reconnaissance purposes, was unable to detect and hit in-depth objectives (20). Moreover, fire planning was almost absent at operational level and only a few countries had general support artilleries at a level higher than division. The main consideration emerged in 1914 was that the artillery fire was inadequate to overcome the stalemate deriving from the failure of the first offensive operation.

The solution, which took four years to develop, is still valid today: the capability of detecting and hitting objectives deep into the adversary deployment (deep operations) by using the "system of systems" of the time, in other words the technology of indirect fire (21) (through the manoeuvre of trajectories and guns). In substance, Bailey stresses that this philosophy appeared so revolutionary at the time that the employment of tanks, aircraft and nuclear weapons did not add anything conceptually new to the original tridimensional model of war; if anything it only improved the model's efficiency (fig.4).

A second classification, complementary to the preceding one, is formulated by Kreprenevich (22), who indicates **ten revolutions in military affairs beginning from the XIV century**. Nevertheless, in our opinion, there are thirteen of them in a chronological order of appearance (23).

THE CHANGES FROM THE XIV CENTURY UNTIL TODAY

During the Middle Ages the Barbarians introduced the harness



for horses but, above all, the **cavalry established its superiority**. The impact of the cavalry maintained its decisive importance in the battles of the time until the advent of **the infantry revolution**, in which the soldiers on foot took on a predominant role vis-à-vis the cavalry, owing to the great influence of archery used with great skill in the XV century by the English and Dutch bowmen against the French cavalry, and by the Genoese crossbowmen. The diffusion in the same century of the first fire-arms brought about a remarkable progress in shooting and the consequent **artillery revolution**, which nevertheless did not substantially change the conduct of battles, which were still bound to the traditional schemes that were to remain unchanged until the XIX century. (24) The first World War witnessed a considerable development of the artillery, to the point that within the English and German armies, the ratio between gunners and infantrymen doubled and, within the French and the Russian armies, triplicated. (25) New gigantic arms and munitions industries were born out of nothing. The main characteristic of the employment of artillery were the enormous convergences of fire

against fixed and preestablished positions with the purpose of preparing the assault of the infantry. (26) Between the two World Wars, there had been a tendency to further increase the power and mobility of the guns, in keeping with the more and more widespread military motorization. When the conflict broke out, the artillery confirmed its destructive function, which was effectual also in the dark and in bad weather conditions. (27)

On the maritime front, the **naval revolution** came about when the ships were transformed into platforms with guns (XV century) used to sink or damage the enemy ships before the boarding action. The necessity of steering the ships according to the guns' direction of fire entailed giving up the "front line" and adopting the "row line" position as typical formation, because the artilleries were aligned sideways of the ships.

The fortifications revolution, started in Italy during the Communes period, asserted itself in the XIX and XX centuries (28), in order to face the threat of the artillery. The continuous front fell into disuse and was replaced by fortifications with separate strongholds. However, during the

last world conflict, there still existed a line of continuous fortifications, the famous Maginot line. This line - built between 1930 and 1937 - did not change the landscape/environment since all the defensive structures were set deep into the ground, thus constituting a continuous defensive front. At the time the Maginot line was considered storm-proof, being based on centralized command, integrated communication system, defence capability, high fire-power, possibility to manoeuvre the reserve, as well as logistic support. Although the in-depth deployment of armoured forces provided it with a certain resilience, the fortification concept lost importance with the arrival of the *Blitzkrieg* (1940-1941), to such a point that, since then, it has been considered a taboo.

Between the XIV and the XVII centuries, we had the **gunpowder revolution** and the **evolution of the infantry weapons**. The units were equipped with sidearms (pikemen and halberdiers) and with firearms (arquebusiers and musketeers). The latter had the task of breaking the enemy lines, which were then charged with sidearms. The invention of the bayonet fixed on the gun-barrel increased the importance of the infantry that was used with great skill by great leaders, like Frederick II of Prussia and Napoleon I. Since the French-Prussian war of 1870-71, the infantry weapons underwent a remarkable evolution, increasing considerably their firepower (29). The infantry, protagonist of the first World War, improved the attack systems by replacing the dense assault waves with more streamlined and thinned-out assault formations and the defence was focused on the points of greater tactical interest, giving up the continuous-cordon defensive formation. The experience of the first World War oriented the organization and training of the



infantry towards an increased interdependence between fire and motion. The traditional function of the infantry seemed nevertheless cancelled by the vehemence of the German tanks which, by applying the innovative *Blitzkrieg* concept, overwhelmed the Polish, French and Russian infantries. The balance was successively reestablished through the strengthening of the antitank weapons and of the artillery in support of the infantry units.

The **Napoleonic revolution** assumed its **organizational and**

logistic aspects at the beginning of the XIX century. One of Napoleon's characteristics was the constant search for the enemy and the pursuit of surprise. He made estimates regarding the time necessary for the movements and for the concentration of his units, as well as the time required for the outflankings and surroundings, his intention being that of wearing out the forces and moral resources of the enemy.

The **revolution of the land operations** started at the beginning of the XIX century and concerned

the firepower and the transports and communications systems. H.K.B. Moltke, who had become Chief of Staff of the Prussian Army in 1858, perfected the performance of commands, established the General Staffs for coordination, emphasized the sense of responsibility and initiative by applying the *Auftragstätigkeit* philosophy (30), took care that the mobilisation operations were prepared in detail and expanded the railway network and transports. Moltke put Clausewitz's doctrine into practice, adapting also Napoleon's conception (31). In a certain sense, the first World War led to a regression owing to the static nature of operations (32). In the second World War, the employment of the German mechanized forces according to the Blitzkrieg concept succeeded in combining fire with manoeuvre through tactics based on offensive, speed and accuracy of fire.

The **naval revolution** (steamers, battleships and submarines) occurred in the XIX century with the adoption of steam propulsion and with the employment of iron for the construction of hulls. The ships - stronger, travelling at greater speed, capable of making long voyages in all weather conditions - started to have a remarkable offensive power. The advantages were nevertheless reduced because these ships had a lesser autonomy as compared with the sailing-ships and needed a widespread network of fuel supply bases. The first submarine weapons (mines and torpedoes) were also introduced in that period.

Finally, in the tactical field the evolution has never had a pause (33): i.e. the employment of aircraft, aircraft carriers, missile systems and amphibious operations.

The **aircraft** revolution, if one disregards the sporadic employments during the Italian-Turkish conflict and the Balkan wars, occurred during the first World War, where the aviation showed its enormous capabilities (34). At the outbreak of the second World War, the air force

proved itself as one of the most powerful strategic and tactical offensive means (35). The war experiences that followed the second World War, from the Korean war to the Middle East conflicts, consolidated the doctrine of employment of the aircraft according to five fundamental tasks: reconnaissance, bombing, attack, fight and transport. The most recent experiences have confirmed the wide development of joint operations with the Army or the Navy, or with both simultaneously, according to the rule that the forces in combined operations, however employed, act as a unitary system, under the orders of a single commander. The first and main objective that the forces must achieve when they operate in a determined geographical area or operational theatre is to acquire control of the skies and keep it, in order to create the necessary environment of air security, so that the air forces themselves, together with the land and naval forces, may develop their operations (36). The operational principle of the air forces' command and control unity is particularly valid in the conception of the modern conflict, which has ceased to be a sum of land, naval and air battles, conceived and conducted autonomously, but it is now the product of the results of the air, land and naval operations, conceived together and conducted in an integrated and interdependent manner in space and time.

Finally, we have the **nuclear revolution** which started at the end of the second World War. The arrival of the atomic weapon marked the beginning of a new era, in which the United States had an absolute supremacy; but soon also the Soviet Union contrived to realize it, thus determining the division of the world in two great blocs. The discovery of the thermonuclear weapons, the employment of long-range aircraft and, successively, of missiles able to



Italian Paratroopers' checkpoint in East Timor.

to reach any area of the globe, worsened the threat for they became a danger for the whole mankind. This produced a complete overturn of the conceptions regarding the employment of forces, because they had to scatter on wide spaces, concentrating only on the vicinity of the objective for the time strictly necessary and successively spread out, so that they would remain exposed as little as possible, thus making the employment of the nuclear weapon unprofitable (37). At present, a nuclear conflict appears improbable. Nevertheless the nuclear weapons remain instruments of deterrence and/or containment of conflicts that could



involve the vital interests of the nations that possess it. If, on the one hand, the availability of nuclear armaments influences the international rank of the States and widens their freedom of action in the international relations, on the other, it causes a widespread tendency to proliferation (38).

The last two decades of the century, with their great historical events (disintegration of the Soviet power and breakaway of all the countries previously under its influence, independence movements of various ethnic groups, fall of the Berlin Wall, etc.) have witnessed a continuous change in the military strategies which continue to evolve according to the historical-political situation. In particular, air power, nuclear weapons, outerspace and control of the electromagnetic field have added new dimensions to the military power, granting a

substantial advantage to those that have these instruments.

CONCLUSIONS

The discussion of the revolution in military affairs, consequence of the era of information, has been fashionable since 1995, not only in military circles but also in academic and press environments. William Owens maintains that, like any previous revolution, also this one will have an influence on the institutions, on the organizational structures, on the doctrine and rules of employment of the forces. Nevertheless, Owens observes that the main problem does not consist so much in accepting the new but in giving up the old. According to many commentators, the technologies of the future will permit to gather, process, assemble

and broadcast information in real time. This process, if carried out with accuracy and speed, is going to have remarkable effects on the battlefield. In fact, if we know in real time where the adversary forces are and what they are doing, it is possible to surprise and hit them, reducing to a minimum the losses in the friendly field, thus achieving a position of superiority unprecedented in military history.

In the second part we are going to see how a revolution in military affairs is born and developed, expounding the pros and cons and concluding with some considerations and prospects for the Italian Armed Forces.

□

* Colonel,
Chief, Conflict Analysis
Department, War College

NOTES

(1) Free adaptation from Ralph Role, "The 21st Century Soldier", Research and Analysis, Newsletter, Directorate of the Army, Issue no. 8, July 1996.

(2) Santoro, Carlo Maria, "Perchè un esercito" (Why an Army), p.21, on "Esercito e Professionisti" (The Army and the Professionals) edited by Ruggero Stanglini, Army Staff, Rome 1997.

(3) Santoro, *ibidem*.

(4) Adm. Owens, on a page of the Internet, says: "...I would like to have an open dialogue on subjects that I consider important, in order to stir up ideas... what is the impact of the technological revolution on military operations, what are its implications in our strategy, our doctrine and in the command-and-control structures...". See:

<http://www.dtic.dla.mil/defense/link/JTS/vice-chairman.html>.

(5) Dibb, Paul, "The revolution in Military Affairs and Asian Security", *Survival*, Vol. 39, Winter 1997-98, p.93.

(6) The US follows the programme called "USA 21st Century Land Warrior" based on the assumption that the soldier must be integrated in the digitized system of the battlefield. The corresponding French programme is called "French Individual Warrior System", while the British are working at the "Fighting Infantry Soldier Technology" (FIST).

(7) The "Stealth" technology, applied to aircraft (but not only) aims at obtaining a low electronic signature for radar bearing. It is realized by employing composite materials and especially designed aircraft.

(8) Toffler, Alvin and Heidi, "War and Antiwar: Survival at the End of the 21st Century", Boston, 1993, p.30.

(9) Kreprenevich, Andrew, "Cavalry to Computer: The Pattern of Military Revolution", *The National Interests*, no 37/1994, p.30.

(10) Whitaker, Randall, "Revolution in Military Affairs", November 1995 (source: Internet).

(11) The notion of "Military Revolution" has its roots in the Soviet culture of the 1970s and 1980s. Marshal Ogarkov was the first to analyse the potential effects of the emerging technologies on military operations.

(12) Tilford, Earl H., "Revolution of

Military Affairs, Prospects and Cautions", *Strategic Studies Institute of the Army*, June 23, 1995, p.2.

(13) It is known that the effects of the reduction of the threat and, as a consequence, of the economic resources, have entailed a general reduction of the forces (40-50%) in many western Countries. This trend will continue also in the medium term.

(14) Cohen, William, US Secretary of Defence, in a statement made on March 16, 1997, declared: "... Iran is becoming a problem for the United States and the Western world. Our forces must be ready to be employed on the instant. We shall not have again the six-month advantage we had with Saddam Hussein. This possibility is gone forever...". Quoted by *Jane's Defence Weekly*, June 11, 1997, p.47.

(15) RMA-Iwar: abbreviation for "Revolution in Military Affairs - Information War".

(16) Metz, Steven & Kievit, James, "Strategy in the Revolution of Military Affairs from Theory to Policy" June 27, 1995 and "Revolution in Military Affairs" in Newsletter, Directorate of US Army, Issue no 5, March 1997 (The latter is available on the Internet).

(17) It is a matter of reproducing the conditions of the Gulf War, characterized by an extremely low number of casualties, i.e., less than 2% of what predicted (240 instead of 10-20,000). On this subject, see Stephen Biddle, "Victory Misunderstood: Skill, Technology and What the Gulf War Really Tells Us About the Future of Conflicts". *Institute for Defense and Analysis*, February 1996, p.1.

(18) Cohen, Elioth, "A Revolution in Warfare", *Foreign Affairs*, April 1996.

(19) Bailey, Jonathan, Chief, Fire Coordination, ARRC: "The First World War and the Birth of the Modern Style of Warfare", *Strategic Combat Institute*, p.16. This thesis contradicts that of E.H. Tilford, who maintains that WWI caused a technologic revolution, which became a Revolution in Military Affairs only in 1918 (see E.H. Tilford, *The Revolution in Military Affairs: Prospects and Cautions*, SSI, US Army War College, June 23, 1995).

(20) Only some guns were able to strike the targets from defiladed positions and fire ranging was primitive, being based on the gun's commander visual appraisal. Communications with the observers were limited to a few

telephones, megaphones and semaphores, and munitions were in short supply. In 1913, each British gun could count on 1000 rounds, 300 of which were stored in the UK and 500 were to be provided by the factories within 6 months. Of these, only 176 were issued to the batteries, which used them up in 44 minutes, at the rate of 4 shots per minute, whereas in 1918 each gun received 600 rounds per day before every offensive action (J. Bailey, "Field Artillery and Firepower", *The Military Press*, Oxford 1989).

(21) From the technical point of view, this revolution brought about: the employment of topographic maps; air observation for targeting; the definition of the effects caused by the temperature of the charges, the variation in weight of the projectiles and the weather conditions; the first firing tables; the development of communication systems between the observers and the firing line; the planning of fire, the manoeuvre of trajectories and guns. From the organizational viewpoint, it promoted the creation of a command and control structure - at operational and tactical level - together with a logistic and production organization capable of meeting the enormous requirements due to the number of guns and relative munitions (the ratio gunners-infantrymen reached an average of 8:10).

(22) Kreprenevich, Andrew, "Cavalry to Computer: The Pattern of Military Revolution", *The National Interests*, no 37-1994, p.37; E. Lee, 1994, p.3, with reference to Kreprenevich (source: Internet).

(23) For historical references, see GEDEA Encyclopedia and various authors.

(24) Napoleon incorporated some artillery units into the infantry regiments, assigned 8 to 12 pieces to each division and employed the artillery of the Imperial Guard as general reserve. In 1896 the French artillery produced a most modern gun, the famous "soixante-quinze" which was later used in WWI. It was very stable and had a remarkable fire-rate (24 shots per minute); its mount moved sideways on the axle, which was good for raking fire. Several other devices permitted to deliver indirect fire from defiladed positions.

(25) Bailey, Jonathan, "The First World War and the Birth of the Modern Style of Warfare", *Strategic Combat Institute*, p. 16.

(26) A typical example of this technique was the concentration of 800

pieces against the fortress of Verdun. The cooperation between artillery and infantry was raised to a very high level by the French, with the "barrage roulant", a fire curtain that smoothed the way to the advancing infantrymen.

(27) During the conflict, the Soviet artillery turned out to be particularly effective. It consisted of strong artillery units, equipped with tracked vehicles, armed with a 76 or 85 mm gun or with a 122 mm howitzer capable of reaching 50 km/h, with a 90 mm armour and a range of 300 km. Owing to their extreme mobility, they could manoeuvre in all sectors of the front. In July 1943, at Orel, the Soviets, on a front of 80 km, deployed a mass of 150 pieces per km.

(28) I. Hogg, "History of Fortifications", Novara, 1982.

(29) The employment of the machine gun, which had already been used in the American Civil War, had a strong impact on the Franco-Prussian conflict.

(30) Auftragstätigkeit is a command philosophy according to which the commander gives his orders avoiding to impose stringent control measures, thus leaving the subordinates the possibility of making decisions, within the limits of their freedom of action and the authority entrusted to them. It is a concept of German origin, applied in the Anglo-Saxon world. In substance, the commander is more interested in the results obtained by his subordinates than in the way they achieve them.

(31) After attacking the enemy with a very-high concentration of fire, through outflanking manoeuvres, he succeeded in weakening their resistance and annihilated their remaining operational capability. Moltke's success prompted the Europeans to imitate the Prussian army in all fields.

(32) Concurrent causes were: the difficulties in breaking the enemy front, owing to increased firepower, the reduced dimensions of the formations and the success of the outflanking manoeuvres conducted by the enemy wings. As a matter of fact, the deployment of the attackers was wider than that of the defenders, and the latter's reserves were not in a position to intervene before the bulk of the enemy army completed its outflanking action. In 1914, at the beginning of the conflict, the German outflanking manoeuvre, conducted on the basis of the plan prepared by Schlieffen for the invasion of France by a dismounted wing, lost all its effectiveness, because the outflanked forces and the reserves were able to

withdraw. The reserves were transported to Paris by train and, after reorganization, became the bulk of the forces which, in their turn encircled the German outflanking wing. The Germans withdrew and a new outflanking manoeuvre took place, causing the "rush to the sea", the constitution of a linear and continuous front, the end of the so-called "kinematic war" and, consequently, the "trench warfare". Only the recourse to dynamic attacks and the employment of the artillery brought about the solution of the conflict. The great offensive battles based on attacks in waves, with an intensive preparatory and accompanying artillery fire, the employment of new means and the final outflanking manoeuvre broke at last the resistance of the enemy front which had been impregnable for years.

(33) After the cannon-armour duel, which characterized battles up to WWI, came the time of aircraft embarked on special ships, the aircraft-carriers, which played a fundamental role in WW II, by providing air cover to convoys in amphibious operations and also permitting to conduct air raids from mobile bases located at great distance from the objectives. The success of these ships in the following years, thanks also to nuclear propulsion, caused the rapid decline of the battleships, which ceased to be the hard-core of the fleets and whose role passed to aircraft carriers. The introduction of missile systems and nuclear submarines produced another change in naval strategy and a different formation of the fleets. The number of light ships was increased: they were mainly destroyers, frigates and corvettes, armed with missiles and equipped with electronic-coverage systems, capable of carrying out offensive actions against naval, air and submarine targets, escorting convoys and supporting landing operations. Cruisers were improved: today they are all missile launchers, are often nuclear-propelled and are also capable of operating by themselves at great distances for long periods of time. Some types are equipped with landing and takeoff decks for helicopters and VTOL/STOL airplanes. Aircraft-carriers have reached a remarkable tonnage and can carry up to 100 fighter-bombers.

(34) The airplane, initially used for observation, was later employed as a fighter, tasked with shooting down the enemy observers. Only towards the end of WWI, aircraft were especially equipped for bombing. Between the two world wars, the air forces of France, Great Britain, Germany, the United States, Japan and the Soviet

Union were enormously developed.

(35) Besides the classical actions - air battle and bombing - also the combination tank/attack-aircraft proved to be very effective. Conceived and employed by the Germans, it was the main instrument of the Blitzkrieg success (Poland, 1939 and France, 1940). The naval battles of the Coral Sea, Midway Islands and Guadalcanal in 1942 and 1943 were examples of air-naval cooperation and showed that, to win a victory, the naval units had to be supported by imposing air forces. Another form of employment of the air forces was the transport of paratroop units (sometimes very large ones), troops and heavy materials, which were also carried by towed gliders. In this regard, particularly worth remembering are the German actions in Norway, the Netherlands and Crete, the American operations in the Pacific and in Normandy and, above all, the battle of Arnhem, (September 1944) which saw the employment of three airborne divisions (two American and a British one) and a Polish paratroop brigade, for a total of 15,000 men.

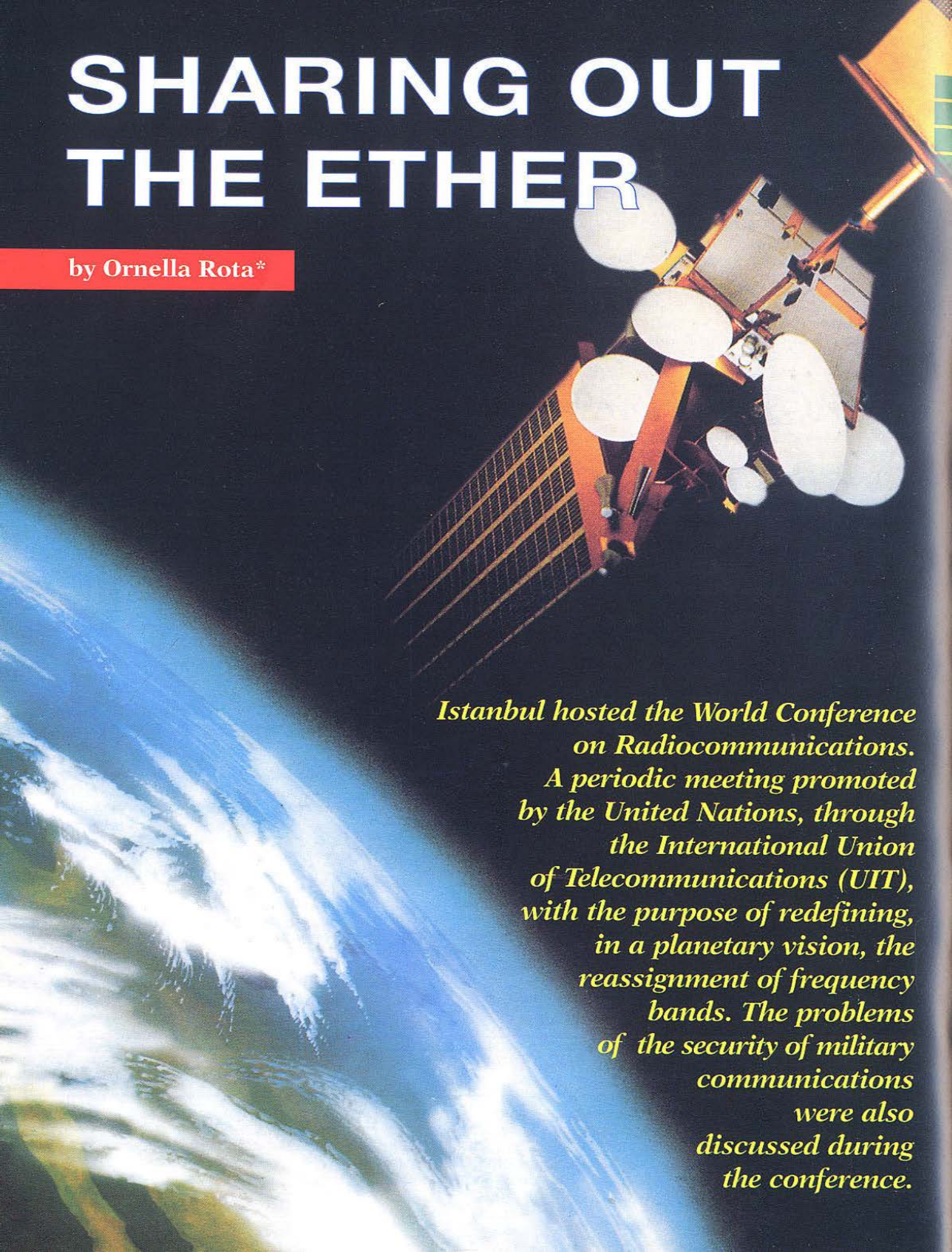
(36) The problem of the operating range, which was often limited owing to the enormous consumption of fuel and the scarce availability of tanks due to the necessity of leaving space for armaments, was partially solved through in-flight refuelling. Aircraft are vulnerable to the defence from ground and sea, but have on their side the surprise factor, on which they can count thanks to their flexibility and speed.

(37) The construction of missiles equipped with nuclear warheads, which were deployed in various part of the territory of the two superpowers (US and USSR) and satellite countries, together with the need to escape danger, entailed the adoption of protection systems: such as the preventive destruction of the facilities for the production and delivery of nuclear weapons, but this proved to be inadequate and hardly effective, because the number of runways was remarkably increased and they were widely dispersed. The interception of the nuclear weapons was also difficult to realize since every progress in interception was countered by a progress in penetration.

(38) Jean, Carlo, "Geopolitica", Laterza Ed., Milan 1996, p.43.

(39) Owens, William, "The American Revolution in Military Affairs", Joint Force Quarterly, Winter 1995-1996, p.37-38.

SHARING OUT THE ETHER



by Ornella Rota*

Istanbul hosted the World Conference on Radiocommunications. A periodic meeting promoted by the United Nations, through the International Union of Telecommunications (UIT), with the purpose of redefining, in a planetary vision, the reassignment of frequency bands. The problems of the security of military communications were also discussed during the conference.

While in the past the possession of the communication assets and production systems was prevailingly national, during this decade a global market has imposed itself, with implications of vital importance for the economy, information, security and financial operations, to an extent inconceivable before. There is an uninterrupted increment of interactive multimedia services, e-commerce, personal computers at home and in the office, public and private TV stations (also of pirate networks), telephones, especially mobile ones. The growth and the evolution of the Internet are constant - in 2005 there will be 500 million users in the world - and by 2010, thanks to the convergence of services, many will be able to reach the net also through TV sets and cell phones, besides the computer.

The development of this extraordinary fixed and mobile multimedia market requires the access to the frequencies; shortage of bands available and overwhelming costs can, in fact, entail the isolation from the active international society.

The world conferences that UIT organizes in turn in the various continents are institutionally charged with examining, reviewing and redefining, at global level, the situation of the frequency bands;

The International Union of Telecommunications (UIT) is the UN body in charge of this sector; its central seat is in Geneva, where the representatives of public and private interests cooperate for the development of telecommunications and to harmonize national policies.

It is the first time that UIT organizes a Conference in Turkey. 2,500 delegates representing over a hundred nations, between May 8 and June 2 gathered in the very modern and beautiful Congress and Exhibition Centre of Istanbul. The delegates were met by more than 300 persons, including translators and interpreters.

The papers produced during the Conference will be reconsidered in Hong-Kong, between the 4th and 9th of next December. For 2001, UIT has scheduled regional Conferences in Africa, the Middle East and the Arab Nations; in 2002 the meeting will be held in a still undecided locality of the Americas and then again in Asia. After Istanbul, the next world Conference will take place in 2003 at Geneva's Palaexpo, from the 12th to the 19th of October.

the ultimate objective is to work out a plan for utilizing the spectrum, with the relevant different assignments to the various regions. This is an extremely complicated and treacherous undertaking: it concerns problems of national sovereignty; its task is to protect the present and future allocations of services in space and on the ground; it must be able to guarantee the existence of both digital and analogue systems; it is called to mediate with the interests of sub-regional systems, originally devised on the basis of fixed coverings that vary for each nation.

With every meeting the stakes

grow higher. The intervals between one Conference and the next (generally 2-3 years) are needed for the concrete application of the decisions that have been taken.

There were as many as twenty-two items discussed in Istanbul and all were also of military interest. The works were focused on procedures and equity in the use of the spectrum bands as well as on the new technologies with their applications. In order to facilitate the expansion of the existing services - from cell phones and satellite systems orbiting near the Earth to satellites for air and maritime navigation, radio-astronomy, Earth exploration and space research - it is essential either to use a lesser portion of the spectrum or to assign it, avoiding interferences.

The most complicated questions are the allocation of frequencies to the *International Mobile Communication (IMT) 2000*, the European satellite radionavigation service "Galileo", the difficulties and problems of satellite broadcasting, the security and safeguard of human life.

IMT 2000 is a family of third-



HF periodic antenna used by UNIFIL at Naqoura, Lebanon.



TCS Lite 9200 mobile satellite terminal.

generation radiomobile systems (they permit a high-quality, wide-band exchange of data, sound and images). The detection of the necessary spectrum dates back to 1992, when the assessment of the necessary frequencies was based on a model where the voice services were considered the largest source of traffic. Since then, the use of mobile services has greatly expanded, thus it has been necessary to find a number of new bands capable of meeting the growing bulk of requests. IMT 2000 includes the *Universal Mobile Telephone System* (the UMTS worked out in Europe). As regards specifically the cell phones, UMTS estimates that within 2010 their total number will be over 2 billions. Already today, in this sector, the range of functions is practically unlimited: from the stock exchange - for

example in Helsinki over a half of the total business is managed by firms of this sector - to the connections with isolated rural African places, where it is more convenient to install a certain number of transmitters than to set up a fixed telephone network, whose copper wires sooner or later would be pulled off by scavenging animals. As for interactive services in general, UMTS believes that there will be an ever increasing request of personalized services and products, capable of satisfying different needs and tastes. This trend requires a global harmonization of the mobile telecommunication system. In particular, it seems that the demand for interactive and pay-TV, as well as that for information and entertainment services, is destined to grow. The problem is that, in order to meet the needs and come up to the expectations, it is necessary to use frequencies that often turn out to be already

employed by other services. The GSM phones, for instance, should avail themselves of band portions that are at present assigned to satellite TV (the dish antenna, precisely the device that we all use to have a relative view of the world) or allocated - by the world radioregulations - to the fixed services in general. The military services, which employ different frequencies in the various areas of the world, are among the latter. Even if the western body specifically deputed to discuss their problem is NATO, and each UIT Conference is attended by the Armed Forces' representatives of various nations, not infrequently it happens that a new service receives a range of frequencies which turn out to be employed by the military. The firm opposition of those governments is inevitable and one must find ways to conciliate the opposing requirements. The Italian laws allow the military approximately 35% of all bands,

a percentage that permits, among other things, the connection of tanks, ships and aircraft between themselves and with the respective commands. The heart of the matter is if and how much such bands can be reduced in order to be transferred to the civilians. This is a most delicate operation, first of all because the various Armed Forces need to be able to carry out exercises on their own or with other NATO partners and, secondly, because some bands are intangible. For example, in this category belong the bands utilized for missile pointing and guidance, for "State" connections (transmission of confidential instructions between the government and the military and/or civilian delegations), for signals used in the cities by the police. Finally, if and when assignable frequencies were found, there would still be the problem of shifting some military services from the existing bands to others and adjusting to the new equipment. In other words, - in Italy as well as in the other European countries - it would be necessary to re-equip tanks, ships, aircraft, etc. with new frequencies. Which would entail enormous expenses, besides creating a set of very serious problems.

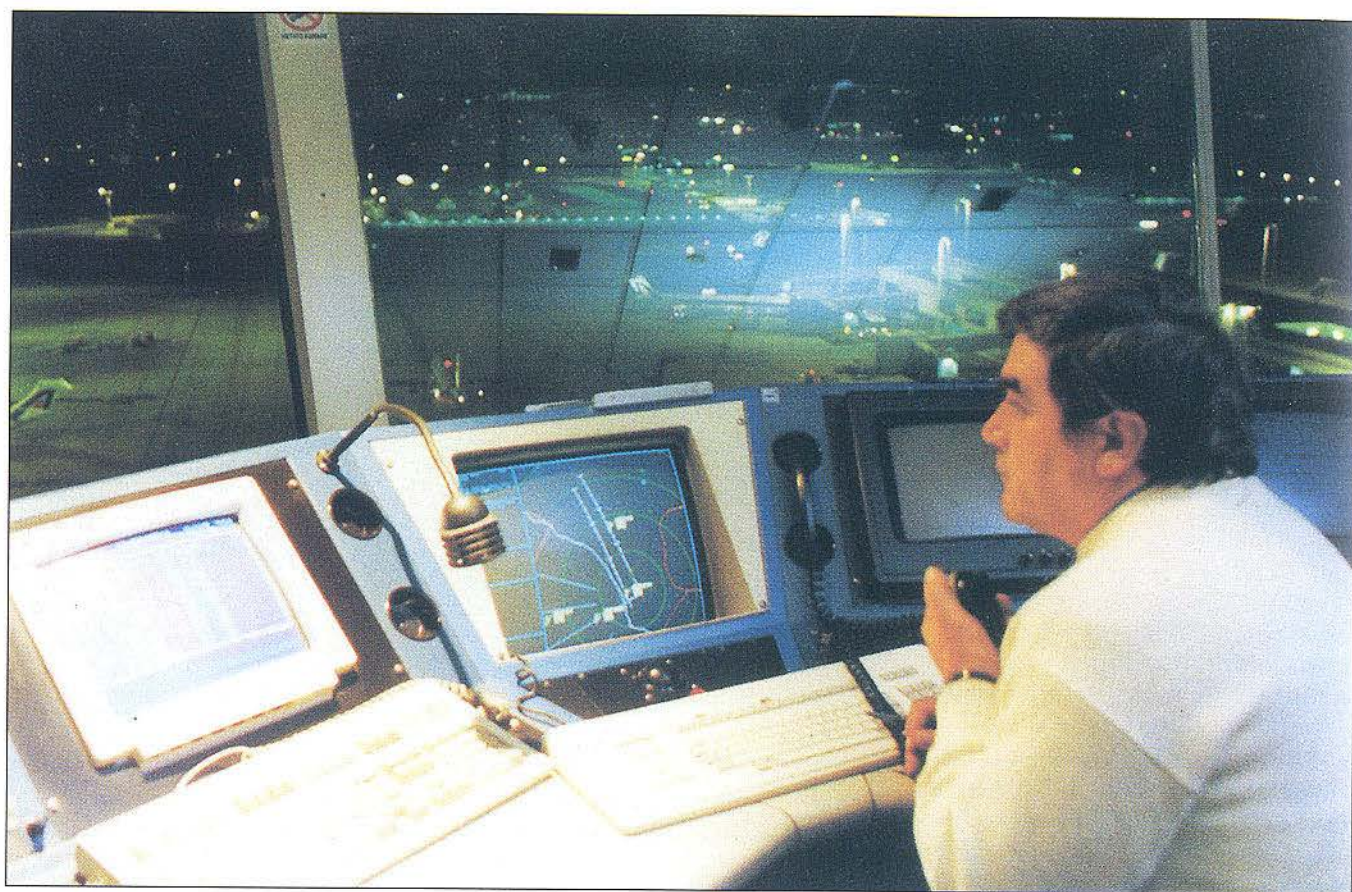
Studied by Europe as rival project to the US GNSS1 (*Global Navigation Satellite Service*), the "Galileo" satellite radionavigation service concerns all the vehicles that move in Italy and in other European countries. GNSS1, which was first conceived and realized for the US military, showed such potentialities that the latter were induced to extend the service to the civilian world, and also to open it to other nations, albeit jealously guarding its technology and management. The situation having greatly evolved with time, the Europeans



now request some frequencies of this system but the Americans refuse to transfer them.

The *Broadcasting Satellite Service* has been discussed especially because of the necessity of reconsidering the plan which, approved in 1977 by UIT, envisaged the availability of five satellite TV channels for each nation. Now, with digital technology, the channels can be at least doubled - and so can the number of services on the spectrum - while some more-or-less complex codes permit to protect the radio links from the interferences of services that are on adjacent frequencies, or even on the same frequencies. A possible option could be that of adding to the five national

services an equal number of regional ones. The Nations that have their own satellites are opposed to this, because they prefer to sell the frequencies. It is a matter of displacing hundreds of *megahertz*, with considerable financial operations (whose proceeds go into the budget of the state, to be employed for initiatives of public interest). The discussion in Istanbul regarded also the French "Skybridge" system, a constellation of low Earth-orbit French satellites, which reach a minimum distance of 20 km from our planet. Some satellites of this type are bound to disturb the satellite TV broadcasts, because they use the same frequencies; the Conference has tried to find the technical



ENAV tower controller. Until the early '80s, air traffic control in Italy was carried out by Air Force personnel.

limits and the rules for sharing the two services (according to a principle that can recall that of the lanes of a highway). As regards radio, the disorder of frequencies is probably the greatest obstacle to the fulfillment of the frequent and repeated optimistic expectations about its future. Our national network, RAI, is regularly burdened with about 600 cases of serious interferences; a little more than a hundred are rectified each year but an equal number of cases arises again. On the other hand, one has only to make a short trip by car to realize how much the local stations disturb the broadcasts; moreover, the lack of isofrequency (an equal frequency on the whole territory) makes it difficult to locate the channels.

Even home reception, especially in large areas of northern Italy, is not much better; the local stations, in fact, transmit generally from the town areas, "blanketing" the RAI signals which instead descend from repeaters located on mountains or hills. In the second half of the seventies, at the start of the Italian radio "explosion", 15 watts were sufficient to make oneself heard over the entire Lombardy. Today, to obtain the same result, we need many tens of kilowatts, with the ensuing serious heightening of the electrosmog threshold. The myriad of commercial radio and TV stations, sprouted (generally with no authorization) after the fall of the Wall, deserve separate considerations. Among them there are also cable and sometimes satellite channels: these are the mini-TVs. In the nineties, video productions have proliferated. On the one side, videocameras and electronic editing have permitted personal

productions, (facilitated by the fact that the transmitting set can be contained in a suitcase), on the other, the home dish-antennas have permitted to surreptitiously capture and retransmit the satellite programmes of Eurosport, Mtv and CNN. This has happened especially in Eastern Europe (from 1989 till today, 3000 small pirate TVs were born in the former Soviet Union), but also in other areas, such as Kazakhstan, Kirghizia, Lebanon - where the pirate stations, which during the civil war referred to almost all factions, have turned to more profitable programmes - and in Macedonia, which, with over 200 TVs, holds the European record. The phenomenon of pirate stations was so great that it often prompted modifications in the national legislations. For example, in Prague, Radio Stalin, installed inside the base of a demolished statue of Stalin, had such a success that nobody dared close it down, until, with the new laws,

Right.

A picturesque view of an "Adelaide" class Australian frigate.

Below.

The antenna of an UHF "SATCOM" satellite system.



it became legal, like the other hundreds of small broadcasting stations. Something similar occurred in Macedonia, where there is still the dilemma of how to legalize stations, which, after the war in Kosovo, address themselves to both Albanian and Serbian audiences. In the Western world, radio and TV stations were generally developed within an old system of regulations (born when production and distribution were expensive and complicated) which makes life difficult for the small stations. But perhaps mini TVs can appear also in Western Europe. In Paris, last year, the activists of *Médias Libres*, who request the introduction in France of public information media free from the interferences of the State and big corporations, climbed on

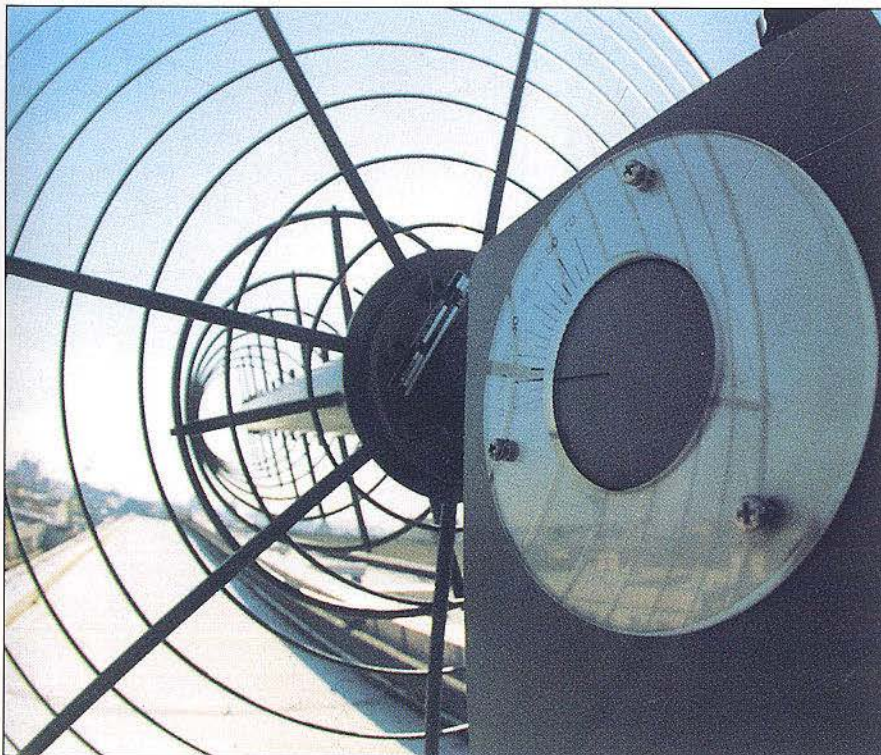
the roof of a building, put up a pirate antenna and broadcast programmes of public interest to 100,000 houses, proving that there are more free frequencies besides the authorized 7 channels.

The problem of interferences becomes absolutely dramatic when they affect the primary services destined to the safeguard of human life. In the past the problems were limited, mainly

because the services were also limited. Today, with their constant increase, also the risk of interferences grows. UIT aims at standardizing apparatuses and procedures on a world basis. Another primary goal is to protect the frequencies destined to rescue operations, which, for the ground segment, are located on medium, short and VHF (Very High Frequency) waves; in the space segment, it is necessary to ensure a maximum protection to both satellite phonic services and radiolocation services. Aircraft especially suffer from interferences linked to short waves, a problem that depends on the different propagation, according to the time of the day, season changes and the level of sunspots. As for the maritime services, there are efforts to improve the efficiency of the spectrum by introducing digital technologies which are going to replace the analogue ones. This will result in an increased number of services, occupying the same section of the spectrum and, in some cases, improving their quality.

□

* Journalist,
Contributor to "La Stampa"

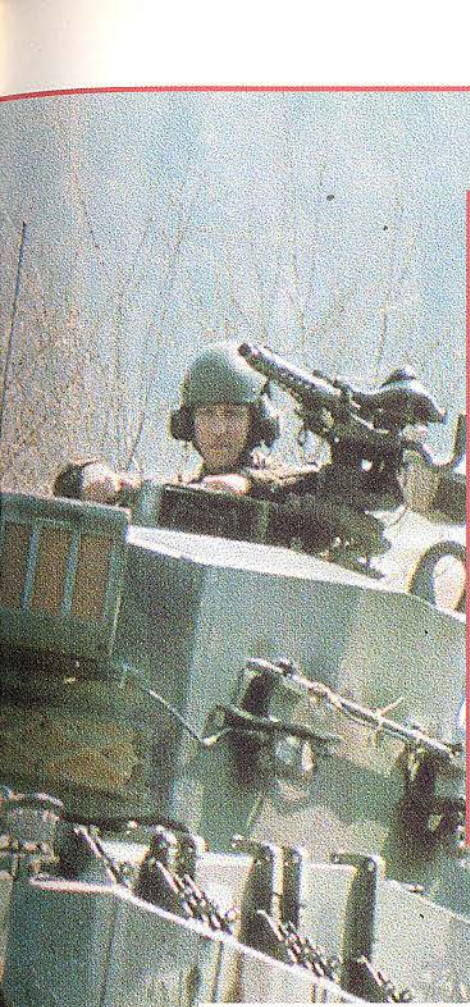


SWITZERLAND

THE NEW ARMED FORCES

by Enrico Magnani

Interview with Lt. Gen.
Hans-Ulrich Scherrer
Chief of the General Staff



The new defence-policy strategy, centred on “security through cooperation”, led the Swiss Confederation to join the “Partnership for Peace”, and to participate, with due respect for the Country’s traditional neutrality, in the missions in Kosovo and Macedonia.

This required a thorough reorganization of the military instrument, in order to adapt it to the new requirements without disrupting the constitutional principles.

In the following interview, Lt. Gen. Scherrer, Chief of the General Staff, discusses with us these and many other subjects.

General, could you make some anticipations on the Swiss Armed Forces of the 21st Century, to the readers of “Rivista Militare”?

In the last decade, the international situation has changed greatly. The present commitments of the Swiss Armed Forces will be confirmed, but will have to be evaluated and formulated anew, in order to better meet the new challenges of the 21st Century. The following principles will be applied:

- strengthening of peace support activities;
- reorganization of defence;
- greater contribution to the safeguard of the general living standard.

For these reasons, the Armed Forces of the 21st Century will have to be characterized by:

- **multifunctionality and modularity:** the Armed Forces are capable of conducting different types of missions in an appropriate manner, and according to contingent requirements, with a brief specific preparation;





An Army Rescue unit during an exercise.

- **readiness and augmentation capability:** as regards the defence tasks, we can count on longer warning times, while for the employment in peace support and risk situations, a higher readiness is necessary and, therefore, the units must be rapidly available;
- **interoperability:** the capability of cooperating with the security organizations in Switzerland as well as with the Armed Forces and organizations of other Countries. Basic elements are: good command of English, staff work, command and control, training and good equipment.

What were the repercussions of the end of the Cold War on the Swiss Armed Forces? What are the main threats, besides the classic ones, to the security of the Confederation? I refer to terrorism, organized crime, drug

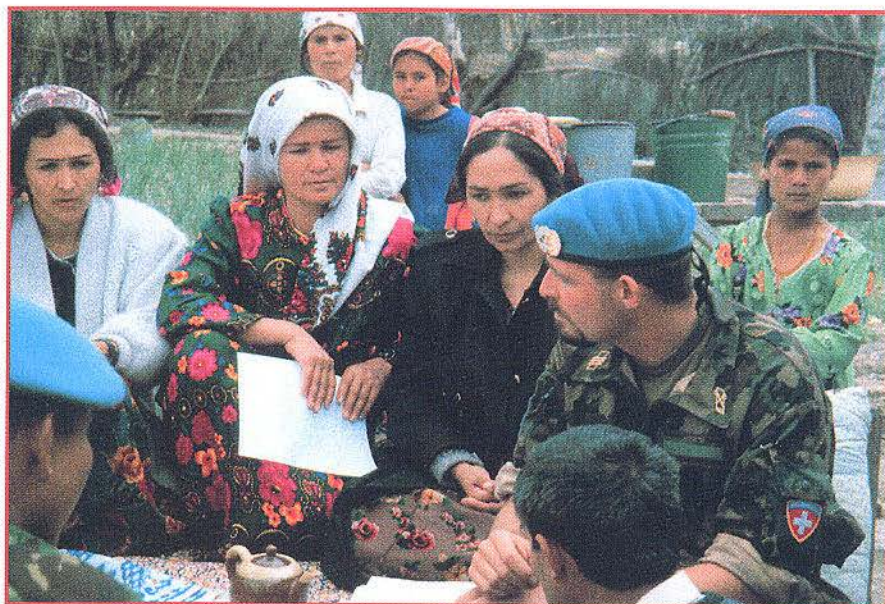
trafficking, illegal immigration.

The conventional military threat has remarkably diminished, leaving space to other much less foreseeable menaces, such as those you just mentioned. Ethnic conflicts are more and more causes of instability; as a rule, they affect individual Countries but, due to their repercussions (migrations, crime, terrorism, etc.), imperil the stability of entire regions. The very

security of Switzerland is not a certainty anymore, but can be guaranteed only through a strong international collaboration and a realistic security policy.

Switzerland participates in Pfp. What are the reasons that

A Swiss observer from UNPROFOR meets a group of Bosnian refugees.





led a historically neutral country such as Switzerland to join this initiative?

The policy of neutrality is the result or the consequence of an accurate analysis of the situation. The definition of this policy takes place during a dynamic process, which must obviously take into due account the very foundations of the law. Precisely for this reasons, the Swiss military neutrality does not permit the Confederation to join organizations such as NATO and WEU. The Swiss strategy on security policy is expounded in Report 90, "The security policy of Switzerland in a changing world", which, at the very beginning mentions "the promotion of peace through cooperation and aid-operations". This guideline has been coherently pursued and, on October 30, 1996, our Parliament approved the "Partnership for Peace" programme, promoted by NATO.

The Partnership was established

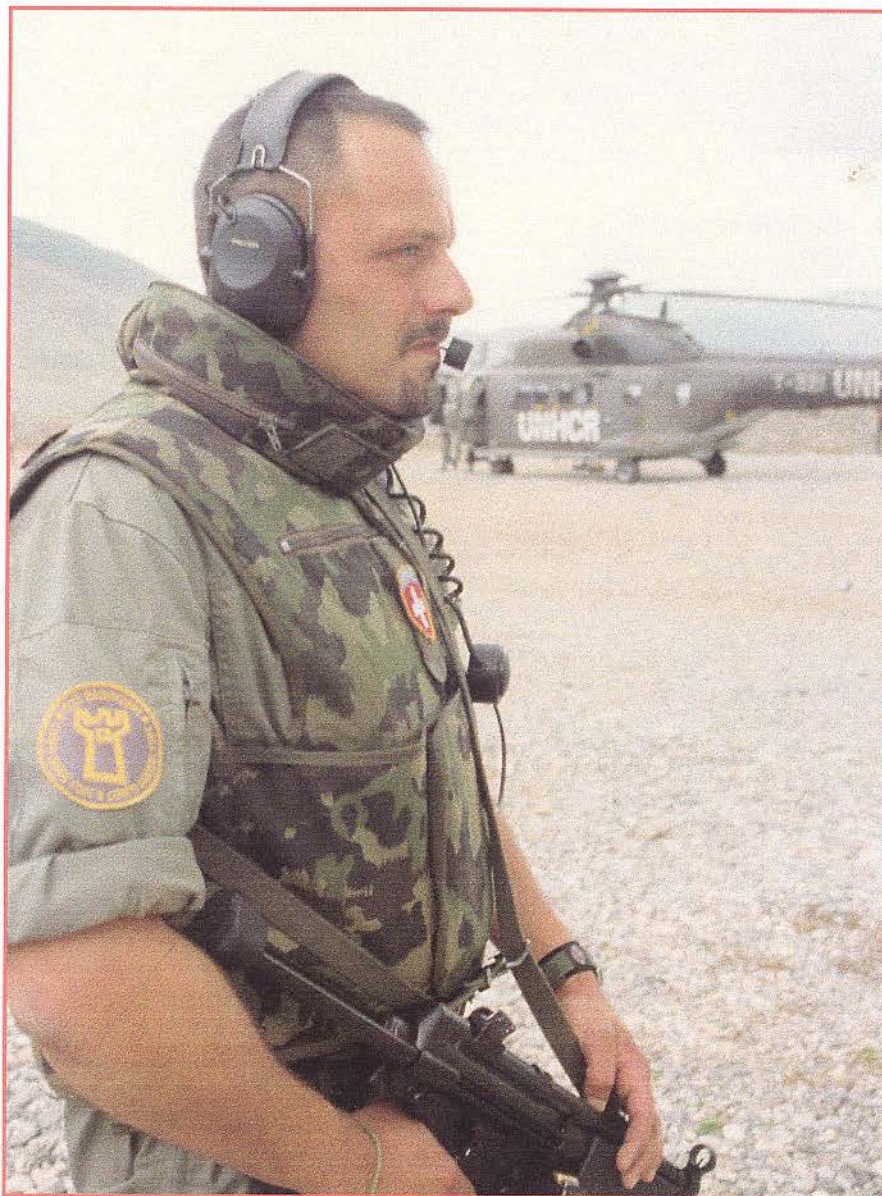
in order to increase the ability of the member Nations to participate in humanitarian and peace-support operations, as well as in rescue operations in case of natural disasters. All this, without depriving the individual Nations of their right to autonomous decisions. Therefore, neutrality is not under discussion, and the long Swiss tradition continues throughout the years.

Up to a few years ago, it was very unusual to see Swiss soldiers outside the borders of the Confederation. First, they were seen at work in Korea, then in Namibia, Western Sahara, Mideast, more recently in Bosnia and Kosovo. The engagement of the Swiss military for peace and international stability is more and more visible, within the activities of organizations such as the UN, OSCE and NATO. What are the motivations for these

Firing exercise of armoured units on snowy terrain. The Swiss Army has recently "put aside" a number of tanks and M109 self-propelled guns.

engagements, and what lessons have been learned from these missions?

The "Swisscompany" with its approximately 160 men has been employed in Kosovo and Macedonia since October 1999. The reasons for this decision can be found in the new strategy on security policy, centred on "Security through cooperation". The cooperation with other countries envisages a greater collaboration, with friendly countries and international organizations, on security and peace-support. This engagement corresponds to our peculiar interests, because it reduces the risk of Switzerland having to endure the consequences of instability and war.



A servicemen from a special unit for the protection of fortress units, on duty at Kukes' airfield (Albania).

manifold, and we make use of them in planning and training.

Switzerland has realized the best model of Militia. But the most diffused political orientations seem to prefer armed forces made up by volunteers and professionals rather than by conscripts.

How do the Swiss Armed Forces consider this trend, which could deeply change their institutional character?

The Militia is a form of general military obligation, by which the soldiers are called for relatively long periods of time to perform particular duties. This model meets increasing difficulties, owing to the changes in the socio-political and economic context of the young cadres as well as in the technical requirements of the Armed Forces. New mixed models are under study, with a minimum percentage of regulars and a certain number of soldiers on temporary contract. The first results have been very encouraging, and the "on contract" component will be increased. But the special quality of the Militia

As regards the lessons, let me mention just a couple of them. We have become aware that it is very important for our Officers to know the command and control procedures adopted at NATO-command level, in order to be able to operate effectively within a CJTF (Combined Joint Task Force). Furthermore, we must adapt our logistic component, which was not structured for possible employment outside the national borders. The lessons that can be learned are



Fortress troops engaged in the external protection of a foreign embassy in Bern, the federal capital.



A "Superpuma" helicopter of the Swiss Army, assigned to the UN High Commissary for Refugees, during an aid operation in Kosovo.

must not be changed.

Therefore, we will never have fully professional or volunteer Armed Forces. This defence model does not correspond to our traditional mentality and does not make the most of the unquestioned advantages of the principle of militia.

Given the growing sophistication of the weapon systems and the continuous increase in their acquisition and management costs, do you believe it is still possible to call large numbers of reservists for training cycles?

Today a soldier attends a 15-week basic training course at a Recruit's School, and ten to sixteen 2- or 3-week refresher courses in the following years. We note that, in

particular during the biennial refresher courses, it is not possible to keep a high-quality level for a long time.

Therefore we must verify whether, on the basis of a new training model, it would not be better to prolong the recruit's courses, reducing the number of refreshers. The latter should be held every year. Furthermore, depending on the resources available, cadres and soldiers should have the possibility of fulfilling their military obligations in a single period.

After the completion of their military duties, all personnel, both the regulars and those who attended refresher courses, are assigned to the reserve for a certain number of years, in order to meet possible requirements of national defence.

It will not be easy to constitute a real "reserve", at least not in the medium term.

What is the role of the Militia

in a Country like Switzerland, where the civilian and military worlds are so closely connected?

The Militia, as an institution, is deeply rooted in our society. But it does not concern only the Armed Forces (citizen-soldier concept), but it permeates all our socio-political system.

Also the members of our Parliament are "militiamen".

The concept of "militia" in our country is often - and wrongly - equated to military service. It is necessary to go beyond that. People with marked command-aptitude put themselves at the disposal of others, in order to perform managerial functions that envisage more tasks than the minimum required by law.

The air force, which is significantly strengthening its interceptor and helicopter units, has always been a component of the Army. This peculiarity, which before could be

Switzerland is not a member of the UN, but frequently assigns its military personnel to peace missions.

recently destroyed 13,500 of them.

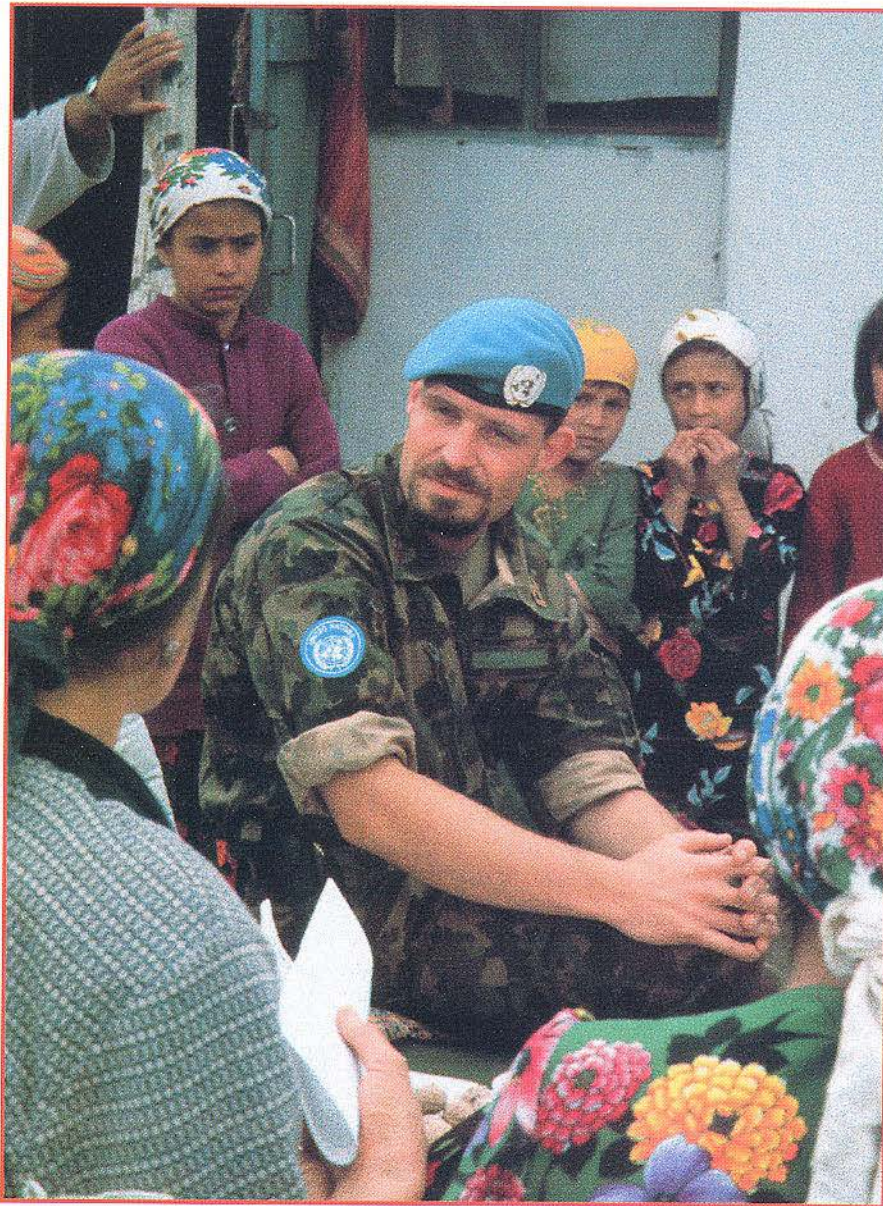
The Swiss Army has a certain number of mountain units. What could be their role in the present operational scenarios? How and in what direction can and should these special units evolve? Finally, can you tell us something about their flexibility?

Our territory is 60% mountains, and all the North-South transversals cross the Alpine region. Therefore the Army must have the appropriate troops. In the future, the protection of these communication routes will be very important for the whole of Europe.

As far as the specific mountain training is concerned, we qualify a small number of specialists at our "Central School for Mountain Combat" in Andermatt. This School organizes many courses for Partnership for Peace personnel, with the participation of many Officers from various Countries.

The Swiss defence model relies on the close integration of its civil and military components. What could be the Swiss Army's contribution in case of natural or industrial disasters or emergencies on the territory of the Confederation?

The Swiss Armed Forces are one of the instruments capable of achieving the goals of the security policy. Switzerland, in fact, considers its security policy as the result of the optimal concurrence of foreign policy, protection of the population, economic policy, police and State security, information, communications and, naturally, the Armed Forces. Very recently, the military intervened massively in the surveillance of the embassies in



considered obsolete, now appears to be a good innovation, seeing that integration among the Services is a must in the conduct of military operations. Could you illustrate the terms of this almost exclusively Swiss situation?

The Swiss Armed Forces, unlike those of the NATO Countries, have never been divided into Air Force, Army and Navy. Up to now, we've had an Army, with an important infantry component, in which the air forces are integrated. At present, in the wake of the "Reform of the Armed Forces of the 21st Century", we are seriously considering a new structure. But it

is still too early to discuss it.

The Swiss defence model, also because of the Country's neutrality and the nature of its terrain, gives a great importance to fortifications. In a moment when mobility seems to prevail over static defence, what do you think about the future of fortifications and fixed installations?

It is true that the importance of fortifications is diminishing, but we want to remain faithful to the things that have given good results and are feasible from the financial point of view. We are eliminating the obsolete installations, and have



Swiss helicopters at Tirana airport during operation "Alba".

Geneva and Bern, the assistance of numerous refugees from the Balkans and, finally, in support of the civilian population after the avalanches of the winter 1998-1999.

Within the sphere of population protection, all civilian assets are coordinated, in order to manage natural disasters, emergencies and consequences and armed conflicts (Fire Brigades, Medical and Rescue Service, Technical Services). The responsibility concerning protection of the population are mainly assigned to the Cantons. The Armed Forces, with their specifically trained troops (rescue units, territorial infantry etc.), only intervene in case of very serious events, when the civil authorities cannot manage by themselves. There are regular joint exercises of cantonal and military "disaster staffs", aimed at ensuring the highest and most efficient cooperation.

The financial instrument is becoming more and more

important for a regular and sufficient flow of resources in order to achieve the constant modernization and adaptation of the Armed Forces. Do you think that, as regards the Swiss situation, the so-called "peace dividends" have been collected?

I think so. By 2001 we are going to

have 65% of the financial means we had in 1990, which is certainly in line with the international levels. Nowadays, all over the world, the Armed Forces must make maximum use of the resources available and get better results with lesser funds.

□

**Journalist*

Lieutenant General Hans-Ulrich Scherrer was born in Mosnang (Saint Gall) in 1942.

Gen. Scherrer was commissioned in 1964 and in 1969, with the rank of 1st Lieutenant, commanded a mortar company. In 1973 became a Staff Officer in a Division and in 1980 - as a Major - assumed the command of a Mountain Rifle Battalion.

In 1984 was transferred to the Staff of a Corps; in 1985 he was promoted Lieutenant Colonel and, in 1987, to the rank of Colonel. He then commanded a Mountain Infantry Regiment until 1990 when, promoted Major General, was appointed Commander of a Field Division. In 1998, promoted to the rank of Lieutenant General, he became Chief of the General Staff.

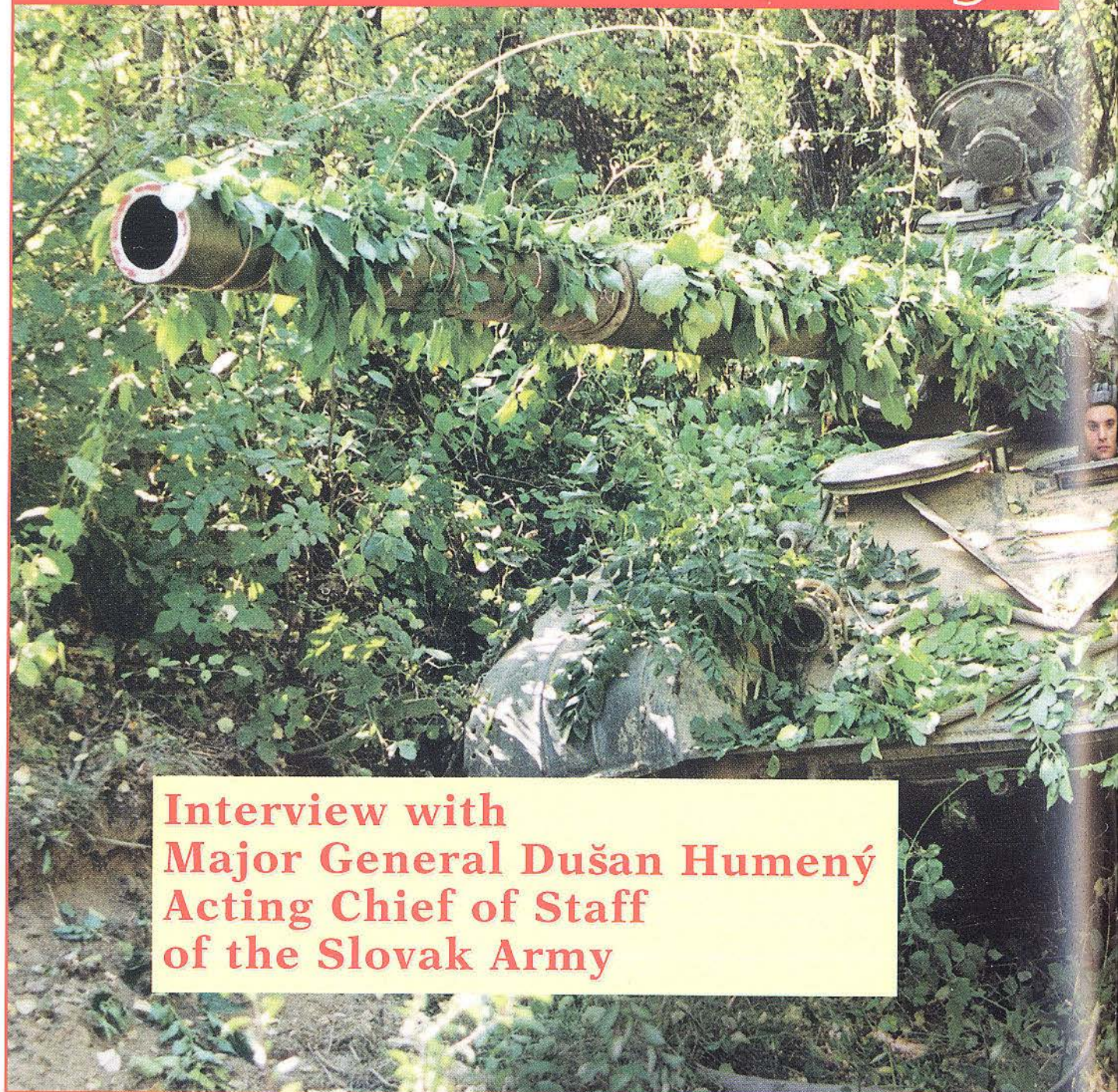
In 1974 he attended the Course for Commanders at Hammelburg, FRG, and, from 1978 to 1979, the "Infantry Officer Advanced Course" at the U.S. Army Infantry School, Fort Benning (USA).

In 1997 Gen. Scherrer attended the Columbia Business School in the United States. His mother tongue is German, and he also speaks fluent English and French.

Lieut. Gen. Hans-Ulrich Scherrer is married and has two children.

Slovak Republic

The new Army



**Interview with
Major General Dušan Humený
Acting Chief of Staff
of the Slovak Army**

The Slovak Army is engaged in a radical program of reorganization which will be completed in 2002. The goal is to realize a highly flexible instrument, capable of giving an effective contribution to peace operations and to assure the defence of the national territory. This and other subjects were discussed in the interview with Maj.Gen. Dušan Humený, who will assume the office of Army Chief of Staff by the end of the current year.

General, the history of the Slovak Army is not long, but it is certainly interesting. Can you summarize its first ten years, for the readers of "Rivista Militare"?

You are right. The Army of the Slovak Republic is really young, and so are the structures we are building now.

On January 1, 2000 we have noted, in fact, a qualitative and quantitative improvement in the changes under way in our Army. In its Programmatic Statement, the Government of the Slovak Republic has manifested its intention to reform the Armed Forces, in order to implement optimal variations which could ensure the defence of the Nation, as full-fledged NATO member. Today we are adjusting the Army's strength, structure, weapons and procedures so as to attain this aim. Once the reform is completed, we are going to have 2 mechanized Brigades; 1 artillery Brigade; 1 all-volunteer mechanized immediate-reaction Battalion; the Home Guard Headquarters with 4 Mobilization Bases; 2 engineer Battalions; training centres of the Army Branches; operational logistic and support units.

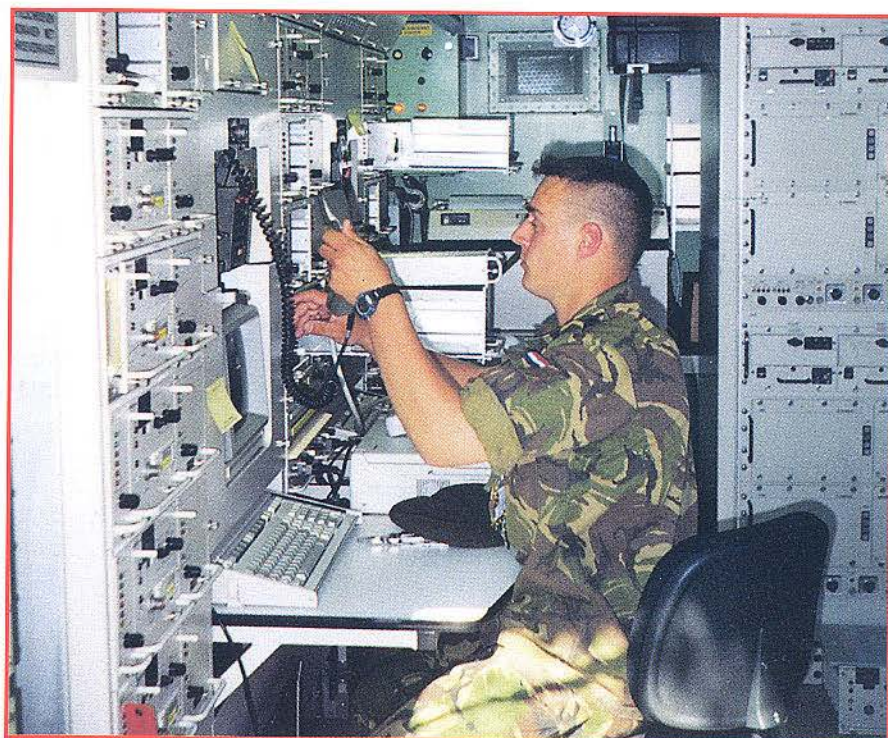
An efficient and, at the same time, reachable goal: within the year 2002, it envisages 12,210 military and 1800 civilian



by Enrico Magnani*

personnel. There has never been a reform of such extent in the history of our Armed Forces. We are acting gradually, being aware of its importance and of the efforts it requires. We have successfully completed the first phase on April 1, 2000 when the Land Forces Command has become operational; as from that date we have created the Home Guard Headquarters and the Headquarters of the 1st Mech Brigade. The 4th Mobilization Base has started its activity, while the envisaged Major Units and formations have been placed under the Land Forces Command and the Home Guard.

We are now in the second phase



of the reform, which calls for the disbandment and reorganization of Major Units and formations. The reorganization of the Land Forces will continue in 2001, in accordance with the recommendations contained in Gen. Garrett's study and the conclusions of a special project. At the moment, I can say I am satisfied with the observance of the schedule. All Slovak Officers hope and wish that by 2001 there will be all the conditions, including,

of course, the financial ones, necessary for the smooth completion of the reorganization.

According to the Slovak Republic's military strategy, the Army must be the main component of the Armed Forces for defence, safeguard of the territorial integrity and national sovereignty. Furthermore it must give a significant contribution to fulfill the requirements of humanitarian and peacekeeping operations

outside the national territory.

How was the process of separation of the Czechoslovak Army conceived and managed? What were the most difficult problems that the Slovak Army had to tackle?

The whole process of separation of the federal Army of former Czechoslovakia was a very interesting and unique operation. As is known, the event was received with attention and appreciation by the whole world. The Czech Republic and the Slovak Republic carried out the simultaneous separation of the State and the Armed Forces which, up to that moment, had been a single structure. The present Slovak Army was officially born in January this year and, as I said, is therefore very young. Actually, there had already been a kind of "de facto" division also before. But I am happy to say that both sides have kept their values of respect, courtesy and mutual esteem, and continued in the cooperation with other Armies, especially with those of our neighbouring Countries.

Since the beginning of its existence, the Slovak Army has



participated in UN peacekeeping missions and, more recently, in NATO operations. Slovak observers and units have operated and are still on duty in former Yugoslavia, Albania, Africa and the Middle East. What were the lessons learned from these missions?

Training, employment and activities of the Slovak Armed Forces in Peace Support Operations, be they UN or NATO, fall within the responsibility of the Defence General Staff. The Army participates in the missions with its personnel. At the present time, 93 servicemen are employed with UNDOF and 43 with KFOR. The personnel for these missions are selected taking into account their moral and physical qualities and the results of psycho-diagnostic examinations. The latter are conducted both on their departure and when they come home.

Based on experience and lessons

learned, the training programme is oriented, in particular, towards psychological preparation. The experience gained is not only applied to the preparation of the successive missions, but is also employed immediately, in the routine work, in order to improve the efficiency of training, equipment, technical support and command-and-control.

Today many Armies are oriented towards a model made up mainly of professionals and long-term volunteers. What is the prevailing trend in Slovakia on this subject? Will conscription remain in force?

At present, the Army performs 78% of the Armed Forces' tasks. Generals, Officers and Warrant Officers carry out 86% of this work, while NCOs and enlisted men perform the remaining 14%. By the end of 2006 there will be

more Warrant Officers, NCOs and professional soldiers.

Our primary objective is now that of completing the immediate-reaction Battalion on a professional basis, since conscripts are available only for 9 months and cannot achieve the required training level. The professional character of the Army is a determinant requisite for our participation in NATO. Of course, this depends on the political will.

What is the Slovak Army's perception of the Partnership for Peace?

The PfP is one of our main activities within the cooperation with NATO and with other Countries. Our personnel have participated in training courses and international exercises. Among the most significant ones, I would like to mention "Cooperative Dragon" in Albania, "Cooperative Lantern" in

France, "Best Effort" and "Rescue Eagle" in Rumania. By the end of this year, our forces will take part in two more exercises, which will take place in the United Kingdom and in the Czech Republic: "United Step" and "Blue Line".

The participation in NATO and the EU are two fundamental objectives of the security policy of Slovakia. Looking at the Atlantic Alliance, what are the priorities set by the Slovak Army in order to make its structure compatible with that of the other land forces of the Alliance? What are the times involved?

The Slovak Republic has always looked with interest at the European and transatlantic security-structures, and today considers the admission to NATO a national strategic objective, especially since some of our neighbours have been admitted. The Government and the Army consider the admission to NATO a guarantee of security and sovereignty, also in view of a reduction of forces. For us, it represents also a verification of the operational procedures and the acquisition of more experience in



command and control, logistics, training and management/welfare of personnel.

A better knowledge of the operational procedures at all levels is an essential priority. In particular, we are interested in interoperability in the communications sector and in the acquisition of ammunition for weapon systems.

We have learned a lot from our participation in international exercises, and this experience produced good spin-offs for staff and training activities. As regards weapon systems, we are particularly interested in improving their combat capabilities at night and in adverse weather conditions, and in the possibility of employing a standard type of ammunition for



the most important weapons.

In Central and Eastern Europe several military-cooperation activities have been taken, with the objective of establishing multinational forces for peacekeeping operations. Does the Slovak Army participate in any of these undertakings?

Our presence is very active in the cooperation projects, within the framework of the multinational unit called TISA, whose purpose is to monitor and control the basin of the river after which it is named. The Main task of this unit will be that of intervening in case of disasters in the river basin, upon request by any of the participating Countries. A Draft of Agreement has been signed by the governments of Hungary, Rumania, Slovakia and Ukraine. Each Country provides a company-level unit. Slovakia will not create special units for this purpose. The units of the existing structure will be employed, starting with the Engineer Battalion of the 1st Mechanized Brigade, which will be located at Michalovce.

The implementation of the system of constant mutual control of the Tisa basin is one of the activities of regional cooperation that have

produced important contacts among the four participating Countries.

The armoured component of the

Army is currently modernizing the T72 tanks. Does this programme have any element in common with those started in Poland, Hungary and the Czech Republic, which employ the same system?

The modernization of armaments is managed by an "ad hoc" Section of the Ministry of Defence, on the basis of the requirements. The Army takes part in this process by defining, in the initial phase, the techno-tactical parameters, and by conducting occasional control and field tests.

As concerns the cooperation of several political subjects in the modernization process, I do not have the elements that would be necessary to give you an answer, since this matter does not fall within the responsibility of a single Service.

□

** Journalist*

Major General Dušan Humený was born in Liptovsky Mikuláš on December 4, 1953.

He attended the Military School from 1969 to 1973 and, after his comission, commanded several units until 1976, when he became Officer in charge of training at the 49th Mechanized regiment.

From 1980 to 1990 he held many command and staff positions at the 31st Battalion of the 331st Artillery Brigade, a unit of the 4th Army (Western Military District).

Gen. Humeny has been commander of the 61st Missile Battalion and the 331st Brigade.

From 1996 to 1999 he has been in charge of the Missile Units and the Artillery Administrative Division at the Army Staff. He attended the specialization course on Heavy Artillery, the Brno Military Academy and the Foreign Languages School in Germany, where he also attended the General Staff Academy. He speaks fluent English, German and Russian.

On January 1, 2000 he was appointed Acting Chief of Staff of the Army and, on September 1 of the same year, was promoted to the rank of Major General.

Maj. Gen. Dušan Humený is married and has two children.

UNITED EUROPE

Between dream and reality

by Luigi Campagna *

From whichever angle we look at it, Europe's history has always been a very troubled one. The events that followed one another along the entire arch of its trajectory have united and divided the Europeans in so many different ways that it is not surprising if, still today, the pursuit of political integration finds quite a number of difficulties. Much has been done. But perhaps there is still a long way to go before the idea of a Europe of Nations is concretely overcome.





BACKGROUND

It cannot be said that Europe did not experience in its past some kind of unity.

The Roman Empire, for example, embraced territories much greater than our Western Europe, even if some of its fringe areas were excluded.

Thus the "unity" remained, formally at least, until the fall of the Western Roman Empire (476 A.D.).

Nevertheless the union was the outcome of the conquests made by the strong Roman army over primitive populations, which, above

all, were worried about the daily problem of survival, unaware of social needs and prospects and totally alien to political problems.

In substance, it was a Union wanted and accomplished by great Leaders who, in the name of Rome, succeeded in conquering almost the entire Continent, imposing the *Pax Romana* in exchange for the concession of a kind of "Romanity", which was more formal than substantial, apart from rare exceptions.

It was however a Union in which there were two important elements (lacking today): common laws

(together with the typical local ones, which were tolerated) and common Latin language (even if not generally spoken).

Afterwards, Europe has been united again, at least in part (in the Middle Ages, for instance, with the Holy Roman Empire of Charlemagne, 800 A.D.), by the ambitions of rulers, who wanted to assert their domination through the possession of territories and the subjection of populations. Populations that were indifferent to the interests of the leaders, who roused fear and terror but who could, at the same time, ensure

protection and survival, in their very limited vision of world and life.

The chain of barbarian and Islamic invasions, of local reactions and wars of succession, of crusades and wars of religion or other wars, with time led to the multiplication and rise of families that fragmented the territories and peoples into numerous possessions, which brought about deep diversifications in usages and customs, in laws and spoken language; the possessions were destined to become hereditary from father to son and were the object of continuous struggles to defend or aggrandize them.

Thus, the stronger families started the dynasties, some of which extended and consolidated their dominions and prestige in such a way that they succeeded in involving their subjects in a kind of "glorification" of their deeds.

The answer of the populations, tepid at first, became more and more fervent and participative, to the point of acknowledging as personal the problems that troubled the dynastic families.

In the collective structures that were thus formed, new, highly binding values converged - pride of affinity, free coexistence, widespread rule of legality, spiritual and religious union, common language and customs - which gave birth to the national states.

Some of them were already created in the first centuries of the second millennium A.D., such as France and Spain; others were constituted later, i.e. Great Britain; others, like Italy, had to wait until the 19th century.

The national States, far from being a solution for Europe's peaceful living, caused a series of dangerous turbulences, because they started disputes among themselves, owing to ambitions and assertion of power, which had become characteristics not only of the rulers themselves but of the peoples united into nations.

In short, examining the last two millennia, one notices that the struggles and wars that have

occurred have made Europe a theatre of continuous battles, producing deep changes, in both the civilian and the religious fields.

THE 20th CENTURY

The century just elapsed, in the first fifty years has witnessed Europe suffering two World Wars, with immense bloodshed and enormous destructions, such as had never occurred in man's history.

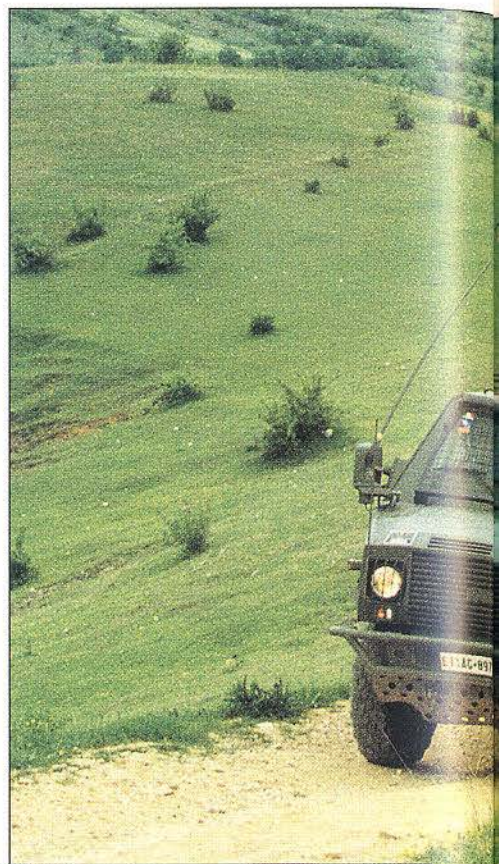
Besides, at the end of the second conflict and as sad seal to its conclusion, a new tremendous event

Right.

Armed vehicles of the "Garibaldi" Brigade on the road in the Bosnian countryside.

Below.

Spanish soldiers engaged in a joint exercise.



had appeared, which forebode no rosy prospects: the employment of nuclear power in war.

The destruction of Hiroshima and Nagasaki filled all with dismay: men on both sides, defeated or victors, of any political creed.

The horror for the damages

caused and suffered, and the panic for a possible future nuclear conflict, were wise teachers for the new rulers who, in Europe, had to solve the problems of a confused and crumbled world: everything had to be reconstructed, even in the victorious countries.



The new leaders, especially the most enlightened ones, had the courage to say, "No more wars in Europe".

Unfortunately, as everyone knows, the conclusion of a war never eliminates all the reasons that caused its outbreak: it cancels some of them, but normally leaves others unchanged, when it does not generate new ones.

Therefore, despite all good intentions, at the end of the second world conflict, a division in two blocs, not only of Europe but of the entire world, loomed on the horizon.

The germs of this division were already alive before the war: they had only been "frozen" in order to combat the Nazi threat.

As a consequence, Europe had

hardly the time to heal its wounds that it found itself in a new worrying situation, split in two parts: on the west, the Atlantic Alliance, politically liberal-democratic; on the east, the Warsaw Pact, politically totalitarian and communist.

The constitution of the Eastern bloc convinced the Western countries to follow other paths, so that, at least within their borders, they could manage to create structures capable of preventing possible conflicts.

The structures were established, even if the partners did not start on an equal footing, considering their different situations. Moreover, they were not intrinsically strong, despite the promoters' good intentions. They were enormously

surpassed by NATO, where the Americans obviously took the lead, while the Europeans were given a support role (a situation that was going to remain unchanged at least until the end of the '80s).

Nevertheless, the Europeans did not carry out this role only. The new structures had promoted the cooperation of people of different nationalities in activities that were sectorial but nevertheless of remarkable strategic importance.

Suffice it to remember the creation of the European Economic Community (EEC, in Rome, 1957), which was firmly wanted by the often mentioned, well-known upholders of European Union: Adenauer, De Gasperi and Schumann.

In fact, EEC substantiated, with activities of remarkable socio-economic importance, the Western European Union (WEU: Belgium, France, Germany, Italy, Luxemburg, Holland, Great Britain) which had been born in Paris in 1954 but still lacked concreteness.

From that time, initiatives followed one another, some good, some not-so good; some slackened by the prevalence of the various interests of the moment.

Until we arrive to the years nearer to us with:

- the revitalization of WEU (1986-1987);
- the conception of European Union (EU) not just WEU, constituted by the European countries of the Atlantic Alliance (the members of 1954, plus Spain, Portugal, Greece and Norway) but open to all European countries willing to join (now, with the admission of Austria, Finland, Ireland and Sweden, there are 15 members, but the trend is to have a further increase);
- the election of the European Parliament by the citizens of the member countries;
- the enunciation of important declarations (such as those of Petersberg, 1992);



Paratrooper from the "Tuscania" Carabinieri Regiment in Kosovo.

- the ratification of important treaties (Maastricht, 1993 and Amsterdam, 1997).

THE PRESENT SITUATION

Today, Europe can pride itself on the important goals achieved, thanks to the action carried out by intergovernmental and Community bodies.

Among the former, the "European Council" deserves a special mention: it is made up by Heads of state and government, establishes the common principles, guidelines and strategies and controls various organizations, among which:

- the General Secretariat of the Council;
- the High Representation for PESC (Common Foreign and Security Policy);

• the Programming and Early-Warning Cell;
Among the Community Bodies, there are:

- the already mentioned Parliament and Commission;
- the Court of Justice;
- the European Audit Office;
- the European Bank for Investments and the Central European Bank;
- the Social and Economic Committee and the Regions' Committee;

Moreover, among the results achieved, one should mention the five freedoms of circulation: of goods, people, services, capitals and, soon, of Euro, the common currency. These are important goals towards a modern, real Unity, but they are still far from being a true supernational structure, like that of the United States of America.

Much has still to be done, both to overcome the inheritance which, as we said, descends naturally from

the past centuries, and to meet the coordination and harmonization needs, which are paradoxically connected with the plurality of the initiatives.

Among the difficulties that still exist, we can count:

- dualism between intergovernmental and Community Organizations;
 - existence of two structures for Europe: WEU and EU;
 - lack of Defence and Security integrated structures;
- to which one can add the following, not-negligible obstacles:
- persistence of a creeping residual protectionism in the various partner Nations;
 - national prejudices and presumptions;
 - mutual mistrust;
 - different mentalities;
 - different guiding structures of social life;
 - different languages.

The dualism between the intergovernmental and Community

bodies, even if in the present political situation cannot be avoided, entails complications and labourious coordinative operations. Evidently, as a rule, the intergovernmental bodies, in the decisions, prevail over the Community's ones, which therefore appear to be in a position of subjection. Moreover the permanence of this dualism leads to a proliferation of structures and offices, in contrast with the principles of the economy of resources, also in financial terms.

A rationalization, or, in general, a simplification, would be desirable, granting at the same time more power to the Community's bodies.

The coexistence of WEU and EU adds further organizational structures to the already complex European world. It is of course true that one must proceed by degrees, considering the institutional diversities of the partners. It is of course also true that, as the Community expands, its rational reorganization becomes more complicated (and there are still many and diversified nations that knock at the EU doors). Even now, for instance, there are Countries



that proclaimed themselves neutral after the second World War and which therefore cannot fully join in the initiatives of the others in the military sector; this is so true that, with the Amsterdam Treaty, the expression "constructive abstention" has been invented, in order to safeguard the decisions that cannot count on unanimity.

Therefore the integration of WEU into EU is an additional problem, and at Petersberg the necessity to implement it was stated, together with the need to establish the still lacking Common Defence.

The lack of integrated Structures of Defence and Security involving

all EU Countries, generates many difficulties as regards an effective common foreign and military policy.

In the European sphere, in reality, some aggregating actions have been carried out, but they were always bilateral or, if multilateral, did not involve the entire Community. In this connection, one can mention the French-German agreement for the constitution of mixed Commands and units, i.e. the constitution of EUROFOR, with integrated Commands from Italy, France, Spain and Portugal.

As a consequence, when problems arose in the abovesaid sectors (Defence and Security), the positions and the decisions of the EU Countries up to now have been marked by improvisation and precariousness, with the risk of failure (which fortunately never occurred).

In the last period, (Helsinki European Council), there has been the acknowledgement of this shortcoming and therefore of the necessity to create new structures, integrated already in peacetime, enabling Europe to take



Bosnia. An Italian officer discussing details of a common activity with a Portuguese colleague.



A German mine-clearing tank in the area of Mostar airport.

autonomous positions and initiatives in case of emergencies.

But the transition from the Council's decisions to facts is not a simple one. Our hopeful wish is that it may happen in a short time.

The persistence of a latent protectionism inside the various partner Nations, produces unbalances and disproportions that are incompatible with the free-market logic within the Community, which should permit the success of productions exclusively by making the most of price and quality.

Fortunately, it is just a remainder of the old European system, which will progressively disappear.

National prejudices and presumptions lead to dangerous classifications, owing to which the Europeans are divided into categories: "cool" or "warm", "intelligent" or "negligent",

"industrious" or "idle", "orderly" or "bungling", "loyal" or "treacherous". A disitinction that exists in any community, be it small or large, and therefore exists also when it is referred to Europe. The danger consists in attributing a single one of the abovementioned categories to the citizens of a single country.

Such an attitude, which, unfortunately, is not imaginary and leads to consider diversities only as negativities, separates peoples and causes mutual intolerance, preventing the amalgamation necessary to achieve the prideful feeling of belonging to the same community.

Mutual mistrust is related in part to what we have just said; but it is more subtle. The exchange of ideas, of trade agreements and even of positive feelings are made difficult, while there should be a maximum confidence and respect, for these are the builders of solid societies of equals, to the advantage of all citizens.

Different mentality is another big

obstacle, even when it only concerns regions of the same nation; just imagine how obstructive it can be within a community that includes, for instance, a Scandinavian on the one side and a Mediterranean on the other.

How peoples from the different European Nations will mix, as regards behaviour and reactions to the numberless impulses, is a big question indeed.

Besides, the structures that regulate the social life of the various Countries are so different in efficiency and procedures that they constitute a further obstacle to a successful union of the European peoples.

The obstacle is certainly not insuperable, but to surmount it one should conciliate, for example, the Germans' high efficiency with the Italians' captious red-tape. Despite the worthy efforts of the last years, we are still burdened by a bundle of bills and decrees that complicate our daily life, even for the solution of banal problems.

The different languages, finally, contribute to the further complication of everything.

Certainly they do not facilitate mutual understanding, especially when the deep meaning of words can express things that cannot be understood through an arid, even if grammatically correct, translation.

FUTURE PROSPECTS

The above considerations could make us incline towards absolute pessimism about the possibilities of achieving a real European union, that should be not only financial and economic but also political, social and spiritual.

One could also say that, after all, to be pessimistic is the same as being realistic.

A realism that, nevertheless, clashes against the will of many Europeans, who keep on hoping, not only dreaming, that the difficulties mentioned before will be overcome, if not downright cancelled, by a persevering will capable of creating, in the course of time, in the souls of all Europeans, the conviction of its usefulness, benefits and high value.

A value deriving from the opportunity of turning diversities into elements of cultural wealth; a precious value capable of making people proud of belonging to a supnation, apt to carry out a primary role in research, production, civil coexistence, defence, security, politics and in the balance of the destinies of mankind.

A Europe completely united in all the vital aspects of a high-level institution would express a great primary power, competing and cooperating on the same level with the other great primary world powers. A Europe of this type would not be, openly or covertly, compelled to take decisions in a subject condition.



One is bound to ask whether such a Europe would be truly welcome in the international assembly.

Public declarations seem to leave no doubts about an affirmative answer. But a reasonable suspicion does not seem completely out of place.

It goes without saying that external impediments, even (and especially) if not openly expressed, could be more hard to overcome than internal ones.

But not even impediments of this kind could affect the faith of the convinced upholders of Europeanism; it would be a matter of taking up a new challenge, which could certainly be difficult but not impossible to meet and win.

In this regard, it would not be inappropriate to make a careful survey to find out, if they exist, the origin and substance of these external impediments, in order to adopt timely and adequate

measures against them. Particular attention should be given in counteracting the "fifth columns" which, while apparently professing their belief in Europe, in fact generate turbulences adverse to the desired Unity, according to a logic that could perhaps be explained as political opportunism, but which cannot certainly be accepted on the plane of coherence and European expectations.

Besides, and as compared to what occurred recently, a united and politically strong Europe would certainly be in a position to better manage problems such as those arisen with the conflicts in the Middle East and in former Yugoslavia, and with the entrance of "Haider's right" in the Austrian government.

□

** Lieutenant General (ret.)*

THE MILITARY INSTRUMENT'S ORGANIZATIONAL PROBLEM

by Sauro Baistrocchi *



INTRODUCTION

The military Organization is a useful instrument only if it achieves the purposes fixed by the society that expressed it. What counts is results, i.e. final success.

The rethoric of engagement up to the extreme sacrifice contributes to the vivid representation of the utmost meaning of military valour, but obviously there is a professional obligation to realize a working operational machinery capable of

meeting the requirements. Given equal capabilities and results, a greater engagement is the indication of lesser efficiency, and low performance affects the available capabilities and consequently the potential results. Considering that the

The new scenarios raise many questions about the future organization of the Army.

Reliance on the human capital is a sure guarantee of success.



military issues, like many others, are strictly related to resources, we can conclude that **success is sufficient, but efficiency is necessary.**

Albeit the logic of these statements can be grasped immediately, it is more difficult

and wearisome to look through and beyond the well-known maze of rules, traditions and customs to see how today's military Institution could meet the requirements of efficiency and effectiveness.

The organizational structure

aims at using in the best possible way the available resources - the human ones, first of all - in view of the results. Therefore, being result-oriented, it meets the **efficacy requirement** while, by maximizing the resources return, provides the necessary **efficiency.**



MISLEADING BEHAVIOUR

Nevertheless, if a situation does not change for some time, men naturally tend to become prisoners of the structure which houses and feeds them, as well as of its relational models, and lose sight of the original value of the Institution, attaching more importance to the structure of which they are members, and to its rules (Man-Structure relation) rather than devote themselves to results (Man/Institution-Results relation).

As a consequence, when the required results change, together with the means and limitations associated with the new problem, the structure's inertia tends to hinder the change, and the structure, which was a "means", turns into a "restraint". A widespread belief maintains that the mission of a responsible official is to respect the rules and guarantee the survival of the structure, often in terms completely independent of

the results produced in favour of the community.

This "administrative cohesion", which, from a certain point of view, could be interpreted as a somewhat positive albeit anomalous form of "esprit de corps", loses instead any institutional value, considering that, within the Organization, it does not lead to a unity of intents, but rather to an inferior kind of negative competition (for the institution, not for the individuals) based, according to the current criteria of personnel evaluation, on the assumption that the rules are purposes, and on the segregation of knowledge ("unconsciously" legitimized by the Institution), to the advantage of the personal interest of the single official. Changes are slow and frequently produce a growth of the administrative components at the expense of the operational ones. Often, the objective difficulty in facing the emerging challenges (when they are eventually perceived) with an inadequate structure causes

"Skyguard Aspide" anti-aircraft light missile system.

further complications in the latter, which nevertheless should somehow permit to manage the new situation and at the same time protect the existing organization at all costs. So we reach the paradox of **pursuing efficacy through the reduction of efficiency.**

A particularly counterproductive and widespread form of transformation is that of applying an innovative technology to a structure not prepared to receive it. Furthermore, changes are scheduled according to development programmes that are rigidly cadenced in time (the well-known "short, medium and long term"), follow complicate procedures, last very long and often need a law to become operational. Therefore they lack the necessary flexibility.

The capability of these programmes of responding to

Prototype of the "Pegaso" self-propelled 155 mm gun, mounted on a modified "Centauro" armoured hull.

rapidly evolving requirements is very limited in highly uncertain and unstable employment contexts, such as the present ones, in that the requirements can be reliably defined only in the short term. In other words, the partial and final objectives of the programme are not defined in their contents nor synchronized, as far as time is concerned, vis-à-vis specific future requirements, but refer to a generic "growth orientation" of the Organization.

It is thus important to schedule the programmes on the basis of coherent objectives (concerning time, contents, techno-financial feasibility) with employment expectations as concrete as possible. The programmes must be open to different development or reconversion options, derived from the assumptions expressed and their specific probability. In other terms, it is necessary to decide the direction to take, but it is possible to fix the final goal only through the formulation of various assumptions/options, all compatible with the development of the programme. We must accept to live with temporary capabilities, which have the ability to evolve promptly and continuously. The military Institution cannot but grow together with the society that expresses it and in accordance with its requirements.

SOME EXAMPLES WITHIN NATO

If this picture describes to a certain extent the Italian situation, and probably that of many other national contexts, NATO itself, which is the product of its member Nations, suffers the same problems.

During the critical phase of the intervention in Kosovo, SHAPE's Joint Operations Centre (JOC) underwent a remarkable stress in



managing what was, after all, a minor operation, and had to resort to substantial reinforcements, both within the Headquarters and outside. In this regard, two main considerations can be made.

First: SHAPE organizational structure, still based on the comfortable administrative routine of the Cold War period, despite the previous experience in Bosnia-Herzegovina was not adequately prepared for the performance of its primary task, which consisted in planning and conducting operations at strategic level.

Second: SHAPE's Staff Divisions, called to reinforce the JOC with their own personnel, opposed a strong resistance, maintaining that, in that case, they would be unable to perform their institutional duties in full and, as a consequence, they implicitly stated that the daily administrative routine was more important than the emergency.

Another very evident example concerns the Command structure

of the Alliance. The regional and sub-regional Commands are static, and were conceived and realized to meet the requirements deriving from the confrontation of the two Blocs.

They can give only a limited contribution to the conduct of today's operations of crisis management outside the borders of the member Nations. The survival of these Commands (1) is justified by maintaining that it is still necessary to face possible contingencies of collective defence, the so-called Art.5.

I do not discuss the soundness of this argument as a matter of principle, mainly at deterrence level. But, on the practical plane, it acritically reproduces the model of the past, completely prescinding from the important facts that have occurred meanwhile, such as, for example, the enlargement of the Alliance and the PfP initiative, which have extended the borders of NATO well beyond the old



Helicopters of the Italian Air Cavalry.

geographic limits, and the **1999 Strategic Concept**, which confirms and extols the strategy of prevention through crisis management. In short, the decision was to keep a static and redundant Command structure planned, but only partially, for a hypothetical long-term task, leaving to the uncertain and partial results of the CJTF programme the task to provide the mobile and projectable Command capabilities - constituted moreover only on an emergency - which are essential in order to stand up to immediate operational requirements.

All this is an additional burden for the Nations (2) called to manage both the static Commands and the in-Theatre operational Headquarters which, by now, have become de-facto permanent.

This example shows how strong the resistance can be, especially when, as in the case of the Alliance, it is necessary to make collective decisions, and make the decisions of 19 partners to converge. Behind this attitude there are legitimate political motivations, but also psychological reasons. For decades,

we have been accustomed to the structures' immutability (and trained accordingly), and erroneously tend to associate their contingent immobility, deriving from the persistence of the mission, with a meaning of universal validity in space and time, which is utterly unfounded. The organizational structure is an instrument, and must therefore be adapted each time to the purpose and the circumstances of the moment.

Within this framework of diffused and often latent organizational inefficiency, the pressure of the growing operational requirements (demand of results) and the unchanging or regressing - at least quantitatively - real capabilities actually available (supply of performances), move the responsible Authorities to adopt corrective measures.

As a matter of fact, we must admit that the top-level military are clearly aware of the critical historical moment, and have the necessary personality. But they face a problem of apparently unsurmountable dimensions, whose solution, in conventional terms, would imply, together with the need to project the whole instrument "ex novo" (supposing that it could be practically possible), a drastic break

in the production of operational results, totally incompatible with the contingent requirements. Thus, they recur to the only available option, and employ their contractual strength to "squeeze" effectiveness from a structure which is inefficient as regards the new requirements. Therefore the Organization undergoes a kind of "dragging effect", resulting in an additional loss of efficiency "by attrition".

WHAT ABOUT EFFICACY?

Up to this point I have centred my discussion on effectiveness. Taken for granted that a greater effectiveness permits with the same amount of resources a greater gravitation of capabilities towards the mission and therefore increases the likelihood of being effective, the interrogatives connected with the efficacy of the military instrument in the new employment scenarios remain unanswered.

Crises cannot be solved on the military plane alone (3). Some important prerequisites can be obtained through a military intervention, but it is nevertheless necessary to have a global and differentiated approach based on a closely unitary and fully shared

strategy, as well as adequate resources, both human and economic.

In this respect, the "war" in Kosovo is emblematic. First of all - and this applies to all "Crisis Response Operations" (CRO) - can it really be called "war", only because the military instrument was used on a large scale? Is it right to say that, in Kosovo, the West won a victory?

I have no doubt that the answer to the first question is "no", and I think that the second question is premature, to say the least.

"War", in its traditional meaning, is a very different thing. In the case of Kosovo, one could call it "conflictive interaction", underlining the politico-economical side of the event, or humanitarian intervention", stressing the emotional motivations.

Being aware of the ethic and moral dimensions of the problem (which I am in no position to tackle), I refer to the Machiavellian cynicism of the adage "the Prince's will is the Law" (4) and I add, optimistically, that "if the Prince is enlightened (which must be demonstrated); the Law is just".

However, for the purpose of this article it is sufficient to accept the present historical situation as a fact, and to assume that the system could still evolve but not go back, i.e. that a conflict of the kind imagined before the fall of the Berlin Wall could now be impossible, and that CROs, even if openly conflictive, contain the seed of a potentially revolutionary approach to the solution of crises.

Even if the emotional reasons that precede, determine and accompany a CRO are manifold, it is necessary to look for systematic solutions and strategies.

The "victory" concept and its measure (5) are obtained from the comparison between the general "end state" and the one actually achieved or, to put it better, from the functionality of the latter vis-à-vis the former. The outcome of a military operation or activity, albeit perfect from the technical point of

view, could be the basis for a defeat if, for example, the achievement of the planned military objectives, because of the modalities applied, endangers the final objectives of the interventions. The more asymmetrical and interdisciplinary is the game, the more difficult it is to evaluate success on the basis of the mere technical and military results.

Obviously, if we examine them in these terms, the results of the intervention in Kosovo are a far cry from those required for a "victory".

These considerations are important for the evaluation of the military instrument's effectiveness.

In Peace Support Operations (PSOs) or, better, in CROs, the purpose is to induce the opposing parties to cooperate; therefore one should be able to create the necessary conditions, find and foster strong common values and employ adequate incentives and effective deterrents.

The use of force serves to impose one's own will or to convince straying minor parties.

In a crisis situation, the parties concerned are active subjects of a carefully concerned process. This could introduce problems from the procedural viewpoint, but reduces the risk of making mistakes deriving from uncontrolled assumptions and incomplete information, thus increasing the possibilities of success. The game consists of the decisional process itself rather than the implementation of the decisions made by each party. The decisional process (the game) turns into a kind of interactive simulation involving everybody. In theory, therefore, the final decision (the game's result) cannot but be successful, since it was jointly agreed upon. If one supposes, as is hypothetically possible, that all parties share the general objectives and purposes, but not necessarily the details and the ways, the crucial and decisive catalyst of the game is to compel all parties to consider the reasons and the conditions presented by the others, inducing them to accept a

compromise. In a conventional process, on the contrary, the authority responsible for the achievement of the "end state" must take upon itself the burden of convincing the parties which, on the other hand, have all interests in pretending to ignore the objectives of the others, in order to gain the maximum from the bilateral negotiations, exploiting to their advantage the negotiatory power of the coordinator (military power) (6).

One of the most significant examples of application of this interaction model is the "joint Implementation Commission", an instrument widely and profitably used in the Balkans.

Besides the examples described, many other components and restraints, that once were practically foreign to, or at least out of, the military world, today are "de facto" steadily included in military operations and influence their outcome. Just to cite some of them, we can mention the pervasiveness of the political component, the role of the media, the "zero losses" restraint, which tends to include also the opposing side, and many others.

As regards the effectiveness of the military instrument, we should ask ourselves three main questions. The first concerns the possibility that the instrument, supposedly efficient and fit for the purpose, is badly employed (7) by the political Authority. The second considers the possibility that the instrument, although perfectly efficient, is not suitable for the purpose, owing to its constitution and capability. In this latter case, its optimal employment would be downright impossible. Clearly, there are also the "half tones", as would be those, probably more realistic, describing a partial capability.

As an example, we can consider the "effective engagement" capability, one of the development activities envisaged within the NATO "Defence Capabilities Initiatives". It refers essentially to the performance of weapon

VCC-80 armoured vehicle equipped with a 25 mm gun and two antitank missile launchers.

systems, but is a good representation of the problem of the suitability of the instrument, as regards the effective use of force in contexts greatly restricted by the "Rules of Engagement".

Finally, the third question which, by introducing the "time" variable, reflects the problem of how an instrument which is suitable today could be maintained so also in the future.

The answers to these questions certainly concern the sphere of political responsibility. But my personal opinion is that it is fundamental, both in the national and international environment, to carefully examine in advance the possible elements of the change, not only in order to find technically sound options, but also to take the necessary corrective measures with due timeliness.

THE PRINCIPLE OF PREVALENCE OF IMMATERIAL ACTIVITIES

Owing to the complexity and the extent of the subject, the discussion process has been developed, so far, in a somewhat fragmented way, through partial images and examples, rather than according to a systematic and consequential logic.

After all, I only wanted to underline the essence of a problem which is generally known, or at least perceived by many. Furthermore, I deliberately omitted some basic considerations which, as a matter of fact, are the main tesserae of the mosaic which I attempted to assemble. I place them at this point, since they are the conceptual hinge between the descriptive and normative part of the survey.

All the examples and considerations presented above have a common characteristic: **the absolute,**



uncontested and potentially growing prevalence, in the military activities, of the immaterial-creative component over the physical-executive one. A minimal demonstration of this assertion, defined as the **principle of prevalence immaterial activities**, lies in the consideration that before any intense material activity there is always an at least equally intense immaterial activity, while the apposite principle is not valid. An exceptional mental effort may be followed by no physical manifestation. In the same way, the use of force without a guidance based on superior knowledge and creative capabilities inevitably brings about defeat, while the immaterial qualities, by themselves, can be sufficient to enable the physically weaker contestant to prevail.

All this is particularly true in today's CROs, where the military instrument essentially operates as an arbitrator-negotiator between the opposing parties, but the principle remains fully valid when force is physically used, as in the air campaign in Kosovo. In that case, the errors were the consequence of immaterial activities of preparation and control conducted in an imperfect or insufficient manner.

If, given a physical potential capable of ensuring standard performance, relatively simple in its execution, we agree on the fact

that the immaterial activities are the decisive and most burdensome component of the operations and - in more general terms - of the physiologic operation of the military instrument, we must also admit that information and knowledge, together with the logic and creativity necessary to successfully handle them, are the life-blood of the immaterial process, and are abundantly present in our time. But they must be used appropriately.

The principle of prevalence applies even more to the general or garrison-type management activities.

These things are not always completely understood. Recently, at NATO, a presentation of the latest prospects regarding the continuous expansion of the new information technologies, someone exalted, as a decisive progress, an oncoming, much more efficient and accurate capability of the information system of discriminating and segregating information. It is true that the possibility of selecting flows on a need-to-know basis, limiting moreover unwanted redundances and saturations, is certainly important but it is rather worrying to hear a praise of the capability of segregation of information through Information Technology devices which, by definition, are destined to divulge it.

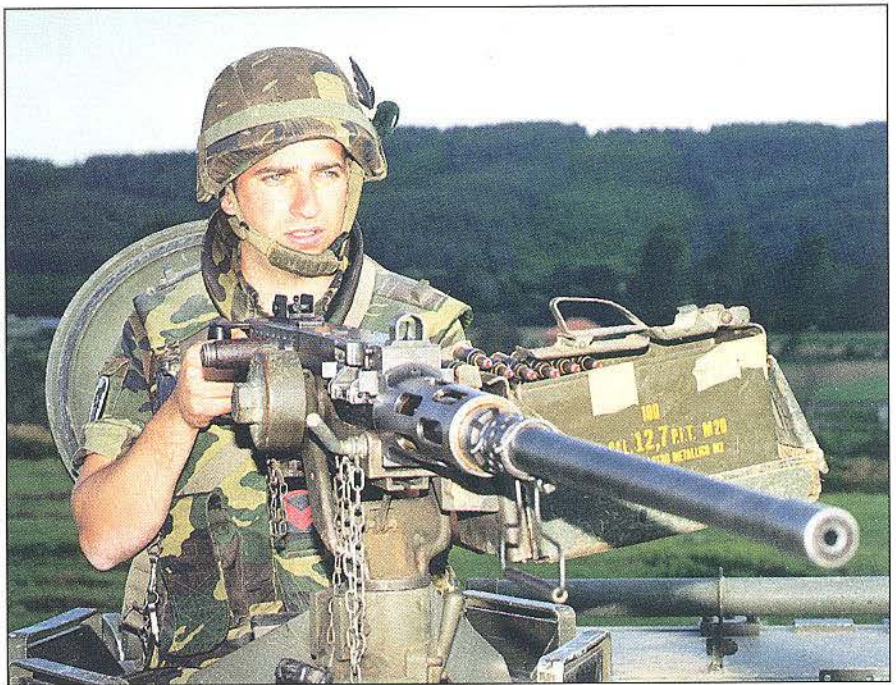
If we consider the obvious fact

An "Alpino" with a 12.7 mm "Browning" machine gun.

that the principle of prevalence is active within all our structures, and observe the involutory effects of the operational behaviour described in the first part of this article, the spontaneous conclusion is to profitably orient the enormous production of mental energy, rather than let it translate into a sterile increase in the entropy of the system. I believe that today it is possible to realize an appropriate field of forces fit for this purpose.

In the following part of the article, I endeavour to outline the main features of the recurrent endogenous process through which the military instrument could acquire and maintain the ability to continuously modify its structural configuration, in order to be effective vis-à-vis the present tasks and the new requirements, maximizing, at the same time, the internal efficiency (8) of the Organization in harmony with each temporary configuration it could assume.

Obviously the terms "tasks" and "new requirements" include every type of traditional or innovative activity, be it managerial or operational, from staff work to the



CROs in the Balkans and up to outright conflicts.

THE TRANSFORMATION PROCESS AND THE ORGANIZATIONAL STRATEGY

The elaboration of the instrument's transformation process takes place through four steps.

The first one consists in defining the basic requisites and relevant set of impulses to which the instrument should respond. In substance, this is the "field of

forces" mentioned above.

It is then possible to proceed to the scrutiny of the behaviour/response of the Organization within the field of forces created by the requisites/impulses; in other words, to examine the concrete working mechanisms of the endogenous transformation process.

At this point, we can try to deduce the tendential model of structure that the process should produce.

At the end, we shall be able to obtain the characteristics of the organizational and technological platform on which the field of forces created by the requisites/impulses will have to be activated.

The project of this process, as a whole, represents the work of organizational engineering that must be realized.

Among the requisites/impulses, particular importance is given to the concept of organizational strategy, which is the synergic interaction between strategy and organization for operational and managerial purposes, where the term "strategy" should be understood in its wider meaning of "line of action", either general or particular.



"Bersaglieri" in a training area.

FUNDAMENTAL REQUISITES AND SET OF IMPULSES.

The requisites are listed below, in a schematic form to make the successive discussion easier. They are a whole of coherent and synergic conditions and limitations, closely interdependent, so much so that their unbalanced implementation could sensibly affect the entire model and thwart its realization. They must be considered taking into account also the "principle of prevalence of immaterial activities" mentioned above.

Together with the requisites, which are the goals or basic objectives of the Organization, the impulses set up the synergic "field of forces" destined to guide the structure's organizational behaviour. They indicate "how and why" we should operate in order to meet the requirements.

RI1: Orientation to Results and Gravitation

The Organization, both as a whole and in each of its constitutive elements, must be constantly oriented to results and capable of dealing, case by case, with new problems. As a normal working procedure, it must be able to gravitate, with all its available appropriate resources, towards the most important and urgent problem. Reinforcements and subtractions for immaterial tasks can be realized without physical movements of persons from their normal posts. "Brain augmentation" is available in real time and without interruptions.

The impulse related to the requisite is determined by the standards adopted for the evaluation of personnel and units. The systematically merit-oriented approach to the evaluation of personnel and units is centred on



the quantitative and qualitative measurements of the results in terms of efficacy and efficiency, actually obtained, through the documented attribution (9) to each member of the Organization of the activities carried out, which must be directly verifiable. During the evaluation, the positive qualifications (10) must be coherently comparable and compared to the negative ones, in order to get the net result for the Institution (11). The outcome of the evaluation is expressed by a numerical score, e.g. in hundredths, and periodically published on a site of the internal information-net.

Man's gratification and the objective recognition of his merits, considering also the inevitable interpersonal comparisons, are the most powerful incentives for the functional and professional growth of the individuals capable of giving added value to the Organization. They also make possible the start and self-alimentation of the virtuous cycle which is at the very foundation of the Organization's development.

The human capital, as a whole as well as single individuals, is the Institution's most precious resource. Its optimal utilization, therefore, must be entrusted to specialized members of the Organization, and must be based on the knowledge and direct

analysis of each individual.

RI2: Organic Structure and Temporary Aggregations

The Organization has its own relatively permanent organic structure, established by taking into account the tasks characterized by greater stability. According to the contingent requirements, the structure is in a position to configure, produce and control, appropriate temporary Task Forces which, in conformity with their tasks, can have a physical, virtual or mixed composition.

The instrument has already its own capability. But, in the interaction with the other requirements, it acquires a much greater potentiality; thus it guarantees a further increase in effectiveness and flexibility, and contributes to save precious resources.

RI3: Organization as an Open System

The temporary aggregations described above, in their working environment can integrate additional external elements (12), different in nature and capability, with which they have to interact both for operations and for management. These elements continue to be an integral part of the



Salvage tank in action on the firing range of the Cavalry School's Tactical and Logistic Support Battalion.

Organization until the end of the specific interaction or requirement. The elements that for contingent reasons cannot be integrated, will have to be appropriately simulated within the Organization.

The incorporation into the temporary structures (Task Forces) of all the interacting external elements ensures a high probability of success for the action under way.

This requirement is a necessary condition for applying the concept called "organizational strategy".

RI4: De-location and Co-location

The elements of the Organization, or of one of its substructures, can be de-located both physically (13) and in their "modus operandi" (14), in order to overcome the numerous social, financial, infrastructural and psychological restraints connected with place of duty and hierarchical subordination. Co-location is necessary for the elements whose physical interaction is needed in order to carry out the task and maximize functional effectiveness.

The impulse consists of the possibility of obtaining exceptional increases in effectiveness as a consequence of the total engagement of all available

resources, independently of their organic and physical location.

RI5: Permeability and Connectivity of the Structure

A direct and constant interaction is guaranteed within the structure both in a horizontal and in a vertical sense also without the intermediation of the organic lines of command. In particular, a close interrelation between the top and the rest of the instrument must be ensured, since this is essential in order to avoid "tears" in the internal

connective tissue of the Organization. The requisite permits very important applications, such as "parallel planning" in real time between different command levels.

The responsible officials, at all levels, are enabled to know, evaluate and use to advantage the available resources, especially the human ones. The Organization, as a whole, increases its internal cohesion and operational synergy.

RI6: Interchangeability and Complementarity of Resources

All resources, and particularly the human capital, wherever they are, are interchangeable and complementary as regards employment.

The control of an "operational object" (activity, exercise, operation, etc.) or of a simple or complex capability (individual, formation, material, funds, etc.) can be easily transferred from a Command to another. For instance, the H24 control of an activity in progress can be exercised in turns by elements located in different and



25mm four-barrel anti-aircraft light system on M113 hull.



"Griffon" AB-412 helicopter lifting a load with its barycentric hook.

remote areas but connected within the same structure: also, the different functional components of a working group or a Command could be virtually integrated, and operate in a synergic way and in close coordination from physically remote sites (15).

RI7: Hierarchic or Dynamic-Relational Order

Between any couple of elements which make up the structure, a hierarchic-relational order is established, with its own intensity and direction according to the task or requirement. The hierarchic-relational system fixes the distribution of responsibility and authority within the structure. It is an advanced form of the traditional Command-and-Control approach, and includes a refinement of the well-know canons (16), deriving from the need to incorporate in the system the relations existing with all the different types of interacting entities (17). The functional discontinuity caused in the

structure by each bilateral relation must be more than offset by the added value generated by it, vis-à-vis the results to be achieved.

RI8: Information and Knowledge

A transparent structure guarantees the widespread diffusion of information and knowledge in real time, so as to meet the needs relevant to training, evaluation, management, administration and operation.

The diffusion of Information and Knowledge increases the culture and professionalism of Organizations and individuals, permits the latter to select and study in depth the most congenial sectors, and stimulates imitation and competition. Furthermore, it reduces to the minimum the time necessary for the execution of an order, permitting to take into account all the relevant added values produced along the line by the resulting orders issued by the responsible Commanders.

The sharing of information

permits to assemble all the subjects which contribute to the organization's success in a single corps, virtual but cohesive and synergic, activating a virtuous cycle, capable of transforming the system in a short time. Everything considered, the partial segregation and the canalization of the information flow remain possible. A limited access to information implies an intelligent preventive screening, i.e. the capability of solving in advance even relatively small problems. In any case, it implies a certain limit to imagination; in substance, it produces mechanical solutions limiting "a priori" the human potential.

RI9: Capability of Development

Under the impulse of the transformation motor, the Organization endogenously develops new functional capabilities, eliminating the unnecessary ones, on the basis of the efficacy and effectiveness requirements.

RI10: Organizational Strategy

Through the potential and actual use of force, the military instrument should be able to produce project-oriented results rather than a simple capability of generic coercion, not systematically applied to the problem to be solved (general "end state" of the mission).

In the first place, the interaction with the political Authority is essential since its contribution is, by now, to be considered pervasive of the military instrument at all levels.

The core business of the instrument is of course the finely graded and punctiform management of force, but the support and subsidiary activities, which at times become important



The "Ariete" tank is armed with a 120mm gun.

components, cannot be overlooked and, be they conducted on one's own or entrusted in "outsourcing" (18), in operations must be kept within the organizational structure of the force employed.

Naturally, the main interlocutors of the instrument are the operational parties, i.e. the factions directly involved in the crisis. They must be integrated within the structure of the Task Force conducting the intervention, or at least effectively simulated when an actual integration is not possible owing to a high degree of hostility.

Other fundamental interlocutors are public opinion and the media.

The starting model is the Joint Commissions' well known model.

The application of this model must however be based on solid doctrinal and technological foundations (19), and be unitary and synergic vis-à-vis the action of the whole Force, contributing to the

conferment of wider contents to the concept beneath the so-called Common Operational Picture, now being realized by NATO. Its application requires, among other things, the development of several conceptual and procedural steps, among which very significant are: the recognition, and integration in the organizational structure, of all possible interlocutors, the negotiation of the interaction modalities, the conclusion of appropriate "cooperation contracts" (20) with the parties, bodies and agencies concerned and the decision on the level of coercion to be activated.

The cooperation contracts are aimed at promoting the collaborative participation of external agencies through the creation of incentives, first of all those arising from the realization of a mutual operational advantage.

In substance, the concept/requisite of **organizational strategy**, which is described above only with reference to the activity in operations, but which can be profitably employed

also in the general management of the instrument, consists in exploiting, to the ends desired, the potential synergic interaction between strategy and organization.

In order to achieve this effect, the organization which devises and implements the strategy must incorporate within itself all the elements, both active and passive, which affect the situation, and define or negotiate the relevant relation bonds with each of them.

EXAMINATION OF THE BEHAVIOUR/RESPONSE OF THE ORGANIZATION

The transformation motor of the Organization is fuelled by the energy produced by the Organization itself, oriented by the Requisites-Impulses field of forces.

The Organization, which starts from its initial configuration, essentially consisting of the structure of the moment, to which the Requisites-Impulses field of

forces is applied with an appropriate platform of support, is capable of evolving "spontaneously", self-generating and self-feeding according to a virtuous cycle.

The general course could be "launching of a great innovative project - increase of the internal motivation - establishment of synergic effects - great results - qualification of Institution and Profession - moral and economic gratification - influx of élite capabilities - self-feeding virtuous cycle". In this regard, the decisive impulses are those generated by

strengthens and accelerates the process in a positive way.

DEDUCTION OF THE TENDENTIAL MODEL OF STRUCTURE

It is important to repeat, first of all, that the start of the transformation process is compatible, apart from some previous arrangements, with any structure. It is thus possible to avoid any interruption in the operation of the system. In substance, the process produces

tasking of the resources assigned, from which they draw, when needed, the necessary technical expertise. The real executive capabilities consist of a Line of Multifunction Operational Units and a Line of Specialized Operational Units.

A specific Agency is entrusted with controlling the operational and training standards, the evaluation of the units, the coordination of the doctrine and lessons-learned cycle, as well as with verifying efficiency and effectiveness.

A single Agency provides for the techno-administrative management of the instrument.

CHARACTERISTICS OF THE ORGANIZATIONAL AND TECHNOLOGICAL PLATFORM

The success of the transformation process, and even its beginning, imply the preliminary realization of an appropriate organizational and technological platform within the existing structure. The Requisites-Impulses system described above, i.e. the field of forces aimed at orienting and promoting the evolutionary trend of the military instrument, is in fact capable of producing the desired effects only if it operates on an information organizational network covering all the interacting elements (users's points).

The users's points are not arranged according to a prefixed relational hierarchy, but are dynamically defined according to the task (reversibility).

Each point can use all the "energy" available on the entire network, i.e. on all other users' points. Thus the structure is not localized, but spread on a series of points, all with the same potential capability, which interact in real time (ubiquity).

The net's "energy" consists of two basic types of resources: information and control. While information (shared resource) is generally available at all users' points, control (assigned resource) is given when necessary, according to a "task



AB-205 and "Mangusta" A-129 helicopters flying at low altitude.

the best use of the human potential, the regained efficiency, and the gratification deriving from the excellent results gradually achieved.

As an example, we can consider that substantial efficiency increases permit to free a correspondent amount of resources, that can be employed for development. The results are reflected on the visibility and credibility of the military instrument, directly gratifying the Profession and the whole Institution as well as, indirectly, the Political Authority. Both effects lead to a greater influx of appropriate resources, and this

deep effects, which are potentially revolutionary, but not traumatic, for the Organization.

The following general model refers to the working situation of the Organization, i.e. it represents an appraisal by deduction of the tendential product of the transformation motor and, therefore, is necessarily generic.

It includes a summit structure, capable of virtually incorporating the whole capability of thought of the instrument, which has the responsibility for the development, technical operation and employment of the whole instrument, together with personnel training. The permanent and temporary variable-structure command aggregations are suited to accomplish all institutional missions, and see to the detailed

oriented" logic. The hierarchical relational organization of the users' points is defined through the assignment of degrees of control over specific sections of the network.

The entire structure of the instrument - its centres of information and action, the command and control lines, the individual operators - and all its work, as well as all the activities under way, are contained, discussed and represented in and by the network. This means that the instrument is constantly capable of responding with flexibility, versatility, timeliness, high effectiveness and efficacy vis-à-vis the final goals of the mission, as well as to any other stimulus, be it internal or external, up to the limits of its capability.

The information network permits to give a practical functionality to the requisites and the relevant impulses. In particular, it is a basis and a vehicle for implementing the concepts of open system and organizational strategy. The existing and already implemented information networks, for instance those within NATO, provide exceptional capabilities, such as secure-voice communications, formatted and free-format messages, cartography, data and displays, even with moving users' points; access to well-established information systems, which integrate their component with common data bases, reliable and secure, connected with data sources; integration of external elements through gateways which allow, if necessary, the appropriate segregation of information; on-line technical and operational assistance, directly on the desk of any users' point, by a remote "expert user", on-line simulation, training and evaluation of personnel and units, directly on the working desk (21).

CONCLUSION

This article reflects the author's personal opinions and his subjective

interpretation of events and situations, and does not pretend to be theoretically rigorous or complete. It simply wishes to be a contribution of thought - sufficiently well-pondered, but still largely under elaboration - aimed at stimulating reflections and hopefully capable of providing the author the collaborative support of those who, having had the patience to read it, share the desire to study more in depth the potentialities of development and achievement of the military instrument along the lines described.

If the process were really activated and kept the many promises that it seems to make now at theoretical level, it could bring about a real organizational and functional revolution in the instrument. Only then, in the wake of other well-established slogan-definitions, we could rightly dub e-military the new way of doing business in the Armed Forces.

Contributions, comments and critical observations are welcome.



** Lieutenant Colonel,
Military Assistant
to the Director, CJPS,
SHAPE, Belgium*

NOTES

1) The large majority of the static Commands resisted remarkably well the reduction attempts envisaged by the "Long Term Study".

2) Paradoxically, they are the same Nations which approved the "Long Term Study".

3) Or, to put it better, cannot be solved on the military plane anymore.

4) The "Prince" is the West.

5) "Defeat" is a victory of a negative sign.

6) This does not exclude the possibility - which must be evaluated case by case - of conducting also bilateral negotiations.

7) At political, not at technical level (taking effectiveness for granted).

8) I.e. its performance.

9) Every activity is "signed" by the member who accomplished it.

10) Particular importance should be given to creativity.

11) Today, in the comparison between an individual who has given an insignificant contribution and one who - through his work - permitted the Institution to save a substantial amount of money, but incurred in a disciplinary sanction, the former is certainly preferred. Also typical is the case of a Commander who congratulates a unit on the perfect execution of an exercise, without considering the useless waste of public resources involved.

12) As will be seen better later on, the innovation is that, among the external elements, we find the operational counterparts, the media, the NGOs, etc.

13) Meaning that they do not necessarily have to share the same quarters.

14) They become active parts of the Organization as a whole, or of the substructure to which they are assigned, thus becoming "deprovincialized" vis-à-vis the operational local environment.

15) Suffice it to think, for example, of the possible savings in the costs of the activities, or the applications in the multinational training field.

16) Full Command, Operational Command, Tactical Command, Operational Control, Tactical Control, Coordination, Administrative Authority.

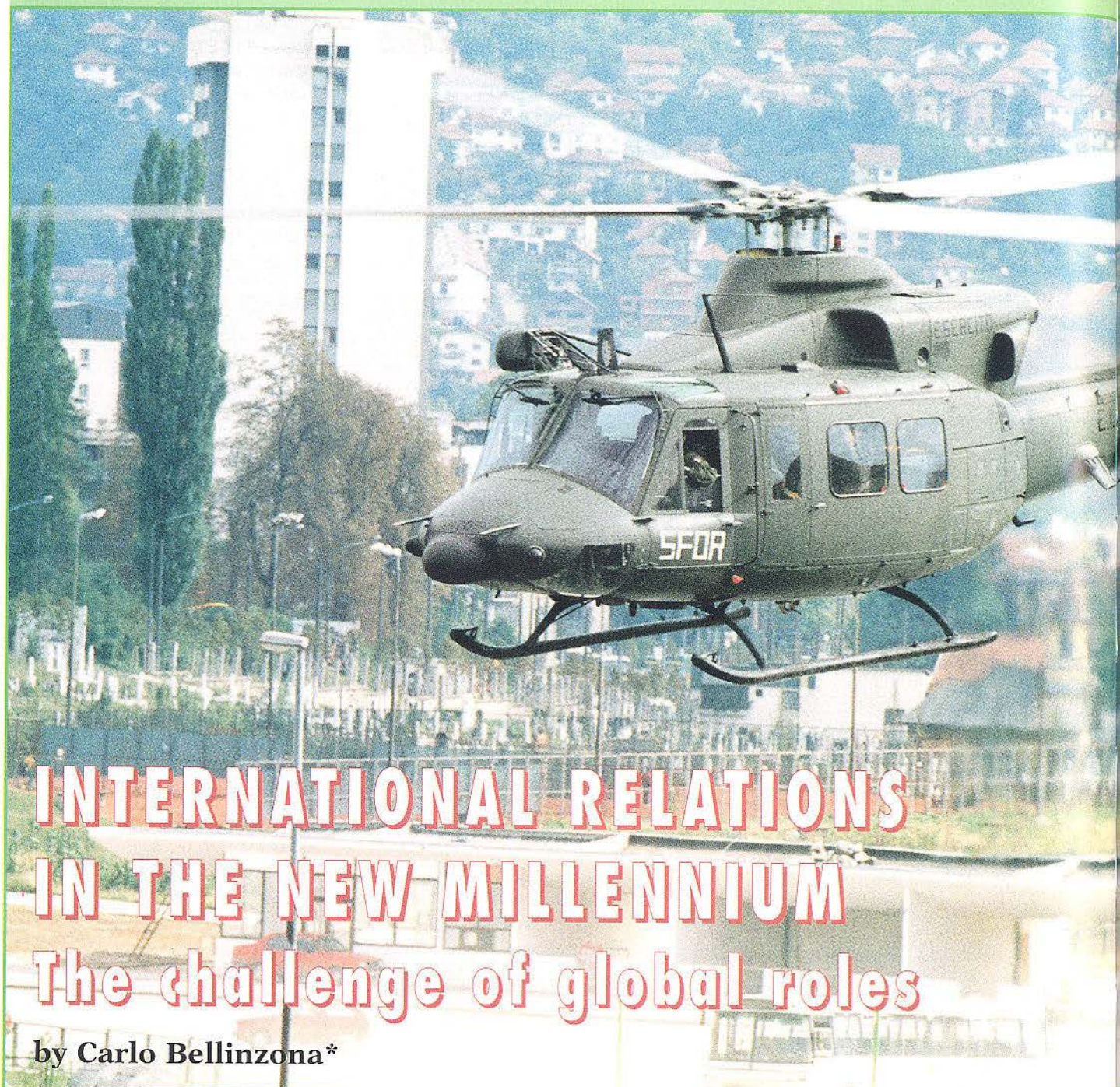
17) Many of these are external to the military Organization (political authorities, IOs, GOs, NGOs, media, local authorities, etc.), others are atypical (non-integrated units from other Countries, military counterparts in the conflict, guerrillas, etc.).

18) To a non-military agency.

19) For instance, the games theory and the information network respectively.

20) Obviously, the term "contracts" is used in its widest meaning. Therefore it is not limited to administrative or commercial relations, but includes all possible agreements and accords, including those with the operational counterparts.

21) In this respect, a very interesting initiative is under way. It is called "Internet-Based Distance Learning Network". Fostered by the NATO Defence College, is also used as an instrument of knowledge and promotion of the military reality, integration of the study and research activities conducted by schools and training centres, interaction and cooperation with the correspondent networks of other Nations and International Organizations (UN, NATO and EU in particular), relations with marginal Countries and communities.



INTERNATIONAL RELATIONS IN THE NEW MILLENNIUM

The challenge of global roles

by Carlo Bellinzona*

At the dawn of the third millennium, an exacting challenge looms on the horizon: global economy.

Let us examine its impact on the western markets and, above all, its geostrategical significance in international relations.



A very complicated activity in the field of researches, but definitely the most instructive, is the one which considers the long-term prospectives in the international relations.

In this task, however, language itself and terminology are often imprecise and insufficient to

describe with accuracy the strategic perspectives of our era.

As a matter of fact we are often forced to use conceptual schemes inherited from the Cold War to define today's reality, having those years as terms of comparison and it is difficult to define and interpret

both the structure and the security scenarios of the current international system.

Under the cultural profile we could define the period of time which started in 1989 as characterized chiefly by "a conceptual anarchy". I intend to emphasize by this the lack of a universally shared key to the analysis of the structure of the international relations and, in addition, the absence of a logical scheme allowing the interpretation of the problems rising in the global arena.

One thing is certain: we now notice the absence of the preventive and mirror-like action of the bipolar Superpowers to restrain the thrusts to international destabilization.

In spite of the firm belief and positive statement of President Bush after the Gulf War, "the New World Order" has not been realised and cannot be an automatic consequence of this new context.

The implosion of one of the two actors in the old system has really opened "Pandora's Box": far away from seeing this New World Order realized, though pre-announced by many, the world has assisted to a wide fragmentation and to the rising of new risks of tension and crisis, even though located in limited areas. Thus, it was not possible to proceed from "a war that had not been fought" to a "pacific peace". Consequently the world became more insecure.

Somebody has sustained that the cause is to be found in the nature of the conclusion of this Third world war, the Cold War, when the winners did not have the political possibility of imposing their own rules on the defeated, associating them to a genuinely true process of transformation.

The theoretic model that has not been realized is the one of

complete hegemony, that is that in the post-conflict system, a single power or an alliance would have had to impose something like a "Code of Conduct", to guarantee security and order: namely stating the fundamentals for a stability-oriented system. This outcome would have required both the strength to impose the rules, and the capacity of making the structure of countries adequate for the new reality, in a virtuous way and without traumas.

In the meantime, we are not facing such a disoriented system to justify totally negative expressions as "*geopolitique du chaos*" used by Ramonet in the review "*Le Monde Diplomatique*". In addition to the seed of destabilization, of crisis and tensions that produce the endemic conflicts in the peripheral areas, we find also the basis for a reestablishment of the system, even though on a much broader time scale. I would consider at least twenty years as necessary.

In other words, from now on we can already foresee the characteristics of a system that is able to replace itself in this confused "middle period": This will look like a geo-economical, multi-polar system, characterized by the presence of a leading pole.

What are the tendencies that support this idea?

One of the features characterizing the century that just came to an end, surely is the interconnection between the economy of the various states and the progressive increased permeability of borders. In the Seventies, political scientists used the expression "interdependence". Such peculiarity was confirmed and evolved in amplitude and dimensions becoming "globalization". This situation diffuses, at least potentially, the opportunities to accelerate development. At the same time it allows also a major and much stronger spread of the effects of local crisis, not only economic, but also of a different nature. In fact, the development of the means of transportation,



communication and information technologies, and their progressive availability to wider portions of the global population are some of the reasons why the "globalization" cannot be understood as limited to the economy, but must be considered implicitly extended to politics. Demographic and migratory explosions, international flow of technologies, transfer of capitals, pollution, security... all have become global issues.

In such an uncertain and confused scenario, one single certainty has become evident: the growing centrality of the economic factors of international relations.

INTERNATIONAL RELATIONS IN THE ERA OF ECONOMIC GLOBALIZATION

In this phase of transition it is

surely more difficult to define the elements that characterize the international system. Facing the emergence of new actors such as states and international institutions, the factors that represent the basis for the power's degree definition are sought to be individualized. The economy, however, is an element one cannot leave out of consideration.

Even before the end of bipolarity it became clear that a state's weight, its position in the world, relies on a set of elements which are different from those that had supported political powers for centuries. The military weight diminished, due to the increased importance gained by the economic factors. Countries like Japan and Germany had been demilitarized and still grew to become powerful economic giants, and it became clear that the fundamental tie between political



importance in the making of History, in various moments working as a major determinant of growth, fracture, conflict, emigration, revolution. But the acceleration of industrialization and technological progress, and the shortening of the dimensions of time and space, resulted in the primary position of economy within the structure of international relations. The process of globalization of the markets affects the organization of the international system in a staggering manner and the economic factors achieve growing geo-strategic meaning.

Left.
Deployment of M-1091 self-propelled guns during a firing exercise.

Below.
The crew of a "Centauro" armoured car at a Checkpoint.



and military power has changed, replacing progressively the military one with the economic component. Today the traditional parameters that always measured the power and relevance of a state (military organization, territorial width, population) appear certainly less determining.

In the meantime, the economy always carried out a role of extreme

The challenge of the new context will be based mainly on economic hegemony.

On the other hand, the wider autonomy and freedom of initiative gained by the international actors thanks to the end of the confrontation of East and West, also released new tensions and sources of conflict. We should not confront them anymore with a

dialectic of contra-position, but within a co-operative political framework of the right scale.

In various dimensions and in various regional configurations, the "rules" of economic globalization will push the emerging countries to reach forms of co-operation, to bear the pressure of international markets competition. Therefore, we will assist to the progressive affirmation of new actors striving to acquire a role in the new international context through the participation in processes of integration or concentration of sovereignty, to the benefit of some "pivotal States".

On the one hand, competition on a planetary scale; on the other, the need to reduce economic imbalance and to provide a system of political security in the different geographic areas, will support the creation, at a continental level, of geo-economic poles.

The long-term perspective for the world is to accept the United States, Europe to its maximum possible extension, China, Japan and India as potential actors of multipolarism, with a virtuous competition absorbing the main tensions.

This model, considered as utopian at a first glance, shall find solid foundations.

The globalized economy may favor the foundation of this new system, but it won't be able to provide it with a "set of values", giving legitimacy and stability. Thus, globalized economic competition could create serious social tensions in areas of poverty and among different economic poles.

Shortage of resources, associated to the increase of economic and demographic gaps between North and South, could lead to a wide range of conflicts: border disputes, apparently originated by ethnic and religious cleavages but rooted in economic needs; resource disputes; social conflicts in the developing countries (the so-called "bread rebellions", internal rebellions, civil wars).



VCC-80 combat vehicle armed with a 25mm light gun and 2 A/T missile launchers on the turret.

Another source of perplexity and potential disruption of the equilibrium is the role of the multinational companies, which will constitute an even stronger element of economic superstructure. The existence of these international economic webs can create concentrations of power parallel to the States and the International Organizations, even though we can't predict the effect of this phenomenon on the mechanisms of inter-state relations.

But my perspective is simple and relies on the long-term process of economic integration. Acceleration of this tendency can make interdependence between states so strong that they are obliged to avoid tensions which could otherwise lead to violent and irreparable disruptions in the system.

Is this excessive trust in a reality that could be defined - using an old terminology - as a capitalist one?

I am not referring to the power of capitalism, but to the one of rationality and to the need for equilibrium, difficult to reach on a global scale but more reasonable on a regional level. Obviously this design will be possible only if adequate schemes to organize and manage this complex phase of transition will be adopted.

In the global scene we refer to, as an example of the multipolar perspective, there are two regions - the United States and the European Union - which seem to me to be heading towards adaptation to the challenges of the future long-term international context.

THE UNITED STATES

For the time being, it is commonly accepted that there is only one superpower, the United States. But

this does not mean that the international system is unipolar. It is not a contradiction.

Perhaps there was a moment - the Gulf war- during which the U.S. could act as the superpower of a unipolar world.

But even at that moment the basic trends were already different: as a consequence, the Americans were soon forced to change their position. If used according to old schemes, the two main means of compulsion that they are using - economic sanctions and military intervention- seem to be losing their effectiveness. Sanctions can be correctly enforced only if they are supported by allies. As a consequence, the U.S. can impose sanctions unilaterally, to the prejudice of its own economic interests and of relations with its allies, or it can renounce to impose the respect of the sanctions. But in this case, sanctions would represent only a symbol of weakness for the U.S..

Also from a military point of

view, the U.S. projection of power is more and more bound by many different political factors. Acting alone, it undoubtedly, has the capability to attack limited enemy targets, and it did so several times. But if it has to implement massive military operations, it must try to achieve an international consensus (in the context of the UN, NATO, or other international organizations), the help of allies and the so-called "zero dead", being their internal public opinion both influential and careful.

Nevertheless, the American policy-makers often think as if the world were unipolar. But doing so, the US is isolating itself. The number of governments that consider their interests as being exactly coincident with the American ones is considerably, little by little, dropping. During the Cold War, the US could consider itself as the government of the Western world, and as the promoter of a policy that produced "public goods", such as security, containment of Communism, open international economy, strengthening of international institutions. In the new international situation, the US can be defined as the most powerful national actor of the system, but as such it is likely to support a foreign policy that promotes only its particular interest.

However, we are still going through a transition period, and the Americans, who have been considering themselves as a superpower for half a century, probably need more time to give a new momentum to their foreign policy. They have a major responsibility, because they must learn to play the difficult role of "democratic superpower", instead of the one of "The sole Guardian of stability".

EUROPE

Disagreeing with Samuel Huntington's opinion, I would like to point out that Western

Civilization, and Europe in particular, is not exhausted nor close to collapse; neither has it lost the hope of a better future, the skill and the will to determine it. By contrast, Europe was re-born, with the intention of facing and solving the challenges of the new century, cooperating with the other political elements of the international system.

Europe will be able to occupy this new political position only if – in the multipolar future system which will be characterized by large agglomerations – it succeeds in solving the following paradox :



Camouflaged M-113 Armoured Personnel Carrier armed with a 12.7 mm machine gun.

Europe has a potentially formidable role due to the very high level of economic integration, while its effective capability of assuming international responsibility is still underdeveloped. In the new system, interdependence between internal and foreign policy will be an essential factor of identity. Moreover, Europe will play a role as an effective Pole of power only on condition that it fills quickly the gap –consequence of the Cold

War– between decisional capability and the extension of its geo-economic interests, also considering the numerous new opportunities offered by the international situation.

The new Europe will have to make a real effort in order to re-acquire –through scientific research– the high technological level it had to renounce in the previous period. It is beyond doubt that in the post war period Europe was forced to face challenges imposed by extra-European actors, and to find solutions in a system where it

occupied a subordinate position.

The time to choose is ever closer, but I'm sure that Europe is walking on the right path, as is shown by its determination in supporting the participation of economically-weak countries and by its strong will to embody all the features of Europe's identity. Not only economy, but also shared values which are equality and human rights.

Europe is not made only of economic elements. The recent definition of common objectives had a key-role: the single market, and above all the monetary union, modified the identity of Europe in



VM-90P armoured car on patrol in Bosnia.

a radical way.

Nations that once played a key-role in the international scene have now transferred some important public powers to inter-state bodies. But other powers must be acquired by European Institutions, as the common defense capability and the common foreign policy. This will to co-operate and to implement a common project of political integration has been underlined by the President of the European Commission, Romano Prodi, who declared: *"A new era of our history has begun. We learned the lesson of*

Kosovo on the costs of a divided and weak Europe".

With these words President Prodi opened last European Summit, held in Helsinki on December 10 and 11.

THE STABILIZATION OF THE NEW SYSTEM

Even if we accept the theory that the international system will evolve under the pressure of globalized economy, we do not have a "legislator" imposing "rules

of conduct" which allow the system to provide stability and to obtain a large consensus. This is the reason why it is necessary to fix some kind of "code of behavior" that works in the multipolar system, in order to avoid the global situation to be controlled, avoiding the risk of chaos and that of the race to enrichment. Without this kind of code, we would face a situation where the will of governments to cooperate could change at any moment, crisis after crisis: the cooperation between the main actors would be contingent, and this situation could be described with the famous Lord Palmerston's aphorism: *"We have no eternal allies, and we have no perpetual enemies. Our interests are eternal and perpetual, and those interests it is our duty to follow"*. This sentence emphasizes the typical egoism underlying a limited concept of national interest, concept that was exasperated during the age of colonial imperialism, but could also describe the logic of future reality.

In order to avoid this problem, we can find support in the international body that would represent the main moral authority in the present situation, i.e. the United Nations.

It is important to recognize that the systemic rules created by the bipolar system were so strong that they replaced the rules of the San Francisco Treaty. As a consequence, after the collapse of the bipolar system, it is urgent that the United Nations become essentially the forum to define the values of the new system, instead of the control institution for the bipolar system's behavior code. This Organisation



"Istrice" minelaying system on M-113 hull.



"Leopard" rescue tank in operation on muddy ground.

must be a leading and crucial element, not only a controller of procedures. So we must give new power to the only body that can work on a global scale level. The failures and the loss of credibility during these last years are essentially due to the impossibility of defining procedures to make urgent decisions.

That's why it is necessary to take into account the multipolarity of the new system and to redefine the power allocation within the Security Council. This does not mean, however, that you have to give more seats only to Northern European States, without doing the same as far as to the Southern Hemisphere is concerned. On this issue, the former Italian President stated that "an Olympus of powerful

States could enlarge the rift, and consequently reduce the excluded States' interest, frustrating their political will and isolating them, giving the unpleasant impression of considering them as mere spectators". Such enlargement of the Security Council would lead to the marginalization of a fundamental part of the future system, making the creation of the necessary body of unanimously shared rules even more difficult.

What is necessary to help transition in a non-traumatic way is probably a reform which should take into account the different regional realities, be they represented by local accords of integration, or by single *Pivotal States*. I'm thinking here about the Italian project which, in a way that is consistent with my reflection, proposes to add next to the five Permanent Members (as in article 23 of the UN Chart) ten more elective, non-permanent and rotating seats. These are to be

distributed to the different geographic regions (5 to Asia and Africa together, 2 to South America and the Caribbeans, 2 to the Western Group and 1 to Eastern Europe). This reform should be credited with the capability to revitalize the International Forum that can help stabilize the system of international relations.

It is clear that only a true reform of procedures, a real regional decision making process – and the subsidiarity of organizations working in the weakest countries, could pave the way to a cooperative dimension or, at least, to a constructive confrontation.

Briefly, this reform could be a major determinant of our future, but we need a global vision and a strong will to achieve it.

□

** Major General,
Director, Military
Centre for Strategic Studies*

COMMAND AND CONTROL

The manifold aspects
of an acronym and its derivations

by Angelo Pacifici*



In the intricate mass of military abbreviations and terms, interpretations are not always univocal. This can create confusion even among the experts, particularly in the sector of "Command and Control".

Few acronyms have contributed to such a dialectic storm within the military organizations as those containing several "Cs", maybe together with one or more "Is" or other letters. I refer to abbreviations such as C2 (Command and Control), C3 (Command, Control and Communications or also Command, Control and Consultation), C4 (Command, Control, Communications and Computers) as well as to the more composite ones, such as C2I, C3I, C4I, C4I2 (Command, Control, Communications, Computers, Information and Intelligence) besides the simpler ones like CIS (Communication and Information Systems) and those almost wrapped in a certain mystery as, for example, C4IEWSR (Command, Control, Communications, Computers, Intelligence, Electronic Warfare, Surveillance, Reconnaissance).

It is curious to note that these acronyms, born in the Anglo-American world as "powers of C" (remember C2, C2I, and C3I?) turned into simple multiplications when their use spread around the world!

By now, these acronyms have been adopted... but what a confusion! All Countries, especially those whose language is of Latin origin, interpreted the abbreviations according to their perceptions, which coincide very little (or not at all) with the Anglo-American ones. But here again there are differences; suffice it to think that the British prefer CIS while the Americans favor C4, and they both mean the

same concept.

And what about us?

The need to acquire common concepts and terms, in particular those used within NATO, led our Army to adopt various acronyms, among which precisely those relevant to communication systems and information processing. In fact the *Comando C4IEW* (*Comando, Controllo, Comunicazioni, Computers, Intelligence and Electronic Warfare*) is, in its very name, an expression of the approach to the allied terminology.

Therefore, it does not seem inappropriate, availing ourselves of different glossaries, nomenclators and dictionaries, and after a research and collation work on the

various NATO and national publications, to give some of the most accepted definitions of the various abbreviations, discussing their meanings and some of the implications deriving from their use.

This will likely be useful in order to consolidate the propriety of language also in this field.

C2 in the archetype of acronyms. When it landed on the pages of NATO publications we (the less young) were startled: why, we were asking, "Command and Control"? If one commands, he obviously also controls! Nevertheless, in practise, there was nothing to do but study the meanings thoroughly, so we adopted the



Armoured vehicle of the IFOR Italian contingent in Bosnia.



Communications shelter camouflaged with scenographic nets.

acronym, albeit with a certain embarrassment. Now C2 is also meant as a "superoperational function". So, what is the real situation? Or, as my old Company Commander used to say: "What are we talking about?"

By C2, the Allies simply and literally mean "Command and Control".

And they give the following definitions, selected among many others because they are considered more to the point, assembled into two groups. The first group could be called *Definitions "by essence"*, and the other *Definitions "as process"*.

DEFINITIONS "BY ESSENCE"

- **Command: an order given by a Commander** (AAP-6). The

Commander can issue orders, (with all relevant implications) because he has been legally attributed the necessary authority (and correlated responsibility). According to the other definition "by essence", "Command is the authority vested in an individual for the direction (attention to this word!), coordination and control of military forces. Therefore, "command" is the authority to give orders and have them carried out;

- **Control: an essential component for the exercising of command;** in simple terms a commander requires control to coordinate and monitor the actions of forces and assets... (ATP-35(B)). This means that "**control**" is **an essential component of the command action**, through which the Commander monitors and harmonizes the actions of the forces that received his orders. To be clear, it is better

to add that the other two components of the command action are "**information**" to make decisions and "**communications**" to carry out and promulgate information.

DEFINITION "AS PROCESS"

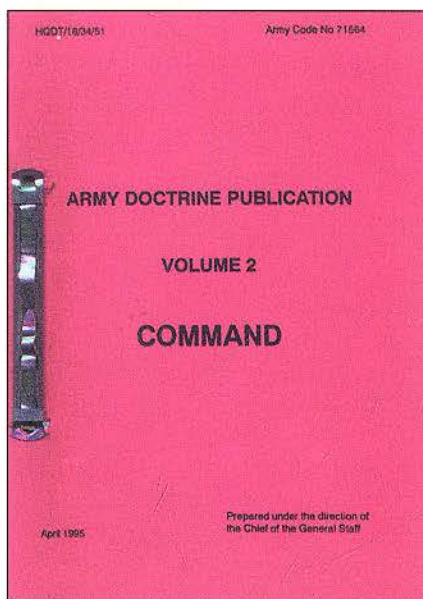
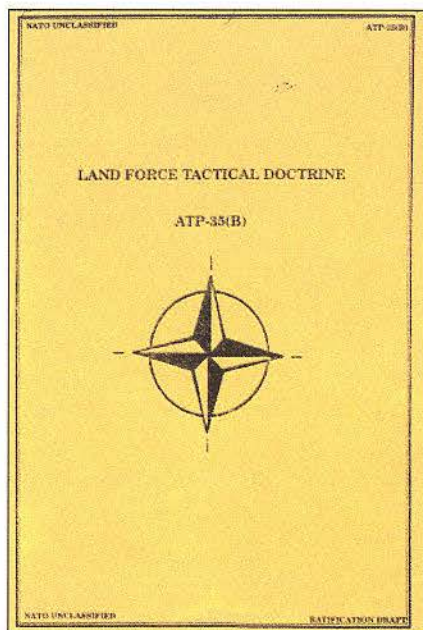
- **Command: the process by which the commander impresses his will and intentions on his subordinates** (ATP-35(B));
- **Control: the process through which the commander, assisted by his staff, organizes, directs and coordinates** the activities of the forces allocated to him (ATP-35(B) and ADP British Army "Command").
- At this point, doubts are likely to be cleared and probably the derived concept will be better understood. In fact, there are C2, C3 and C4 systems and different levels of C2 authority, but also different levels of C2. Before

discussing these levels, it is probably worth dwelling on some traps that can be met when trying to understand those concepts, since they must be somehow adapted to our language. Actually, even when reading some Anglo-Saxon publications we can note some difficulties in figuring out the variegated definitions of the same concepts, especially when they are adopted within NATO.

One example is the verb "to direct" - from which the word "direction" derives - which was mentioned in the definitions given above. Well, if we translate this word hastily, following the assonance with the Italian terms "*dirigere*" or "*direzione*", we make a mistake. But, if we use a dictionary, we will see that "to direct somebody to do something" means to order somebody to do something!

Another mistake, for example, is made when one tries to define "control" as an authority (as we said before, it is instead a component of the exercise of an authority). Probably this error derives from the tiring series of compromises that even a simple definition must undergo in order to be accepted by all the Nations of the Alliance. Even the British Army, in its publication Army Code No. 71564 "Command", Volume 2, in defining "control" as a process (see definition above), says that this definition should be preferred to the one contained in another publication, JSP (Joint Service Publication) 110, of the British Defence and published in the AAP-6:... "control is that authority exercised by a commander over part of the activities of subordinate organizations not normally under his command, which encompasses the responsibility of implementing orders or directives...". Is the British Army right? One would certainly think so. But, where is the mistake?, a curious reader could ask.

The British Army, trying to explain why it does not adopt that



definition, insists that, at any rate, **"command and control" are not "equal partners" as control is merely one "aspect of command"** and adds that, as far as the British land doctrine is concerned, its publication will always use the term "Command", except when it is necessary to refer to the aspects of "control" as a component of the former (ADP Command, p.1-3) adding that... **for this reason, this publication is entitled "Command" in preference to "Command and Control. This is also the approach taken by the US Army in "Battle Command".** The US Army is also

involved, then! At this point, I believe we have enough "material" to meditate on our situation as well.

So, then, where is the error? Well, we think the error derives from the fact we are trying to define the term "control" by itself, i.e. deprived of the adjectives **"operational", "tactical", "administrative"**, etc. which, in fact by qualifying the term **"control", and by being attached to it, actually** give shape to a word with a completely different meaning. In other words, each one indicates a different **"command authority"**, and **it makes sense** to apply the definition written in the box above to the terms "Operational Control" or "Tactical Control", as well as to the other terms that vary the Full Command (FULLCOMD), i.e. "Operational Command" and "Tactical Command", while **it does not make sense** to apply that definition to the term "Control" considered by itself. The following example could make things more evident. Something similar happens when one considers simple and compound words, and the meaning of the latter has no relation to that of the former: for example a "*fondo*", in Italian, can be a piece of planted property, but the "*fondo monetario*" is certainly not a plot where money is cultivated.

In conclusion, it seems appropriate both to consider "control" a component of the exercise of command and consider different levels of the command authority when referring to "operational control", "tactical control", "operational command" and "tactical command". The latter concept will be better clarified in the course of this article.

C2 Systems

The most appropriate definition seems to be the following: a "C2 System" is a whole of personnel, structures, assets, material and financial resources, procedures, which permit a commander to

*Operational Command, Operational Control,
Tactical Command, Tactical Control...*
are all

**“different levels of command authority
exercised by commanders over part of the activities of
subordinate organizations
not under their (full) command (FULLCOMD)...”**

plan, issue orders, monitor their execution and coordinate the activities of the forces allocated to him”. This is a free interpretation of the definition in ATP-35(B). In this sense, by now the use of the double C is accepted also when one refers to “Command and Control Organization, Command and Control Warfare”, etc., even if we should add that the British doctrine refers to “Command System” rather than “C2 System”. The same doctrine, on the other hand, surrenders to the latter term, and uses it widely when it tackles the C2W issue, i.e. the problems of “Command and Control Warfare” (a concept of US origin).

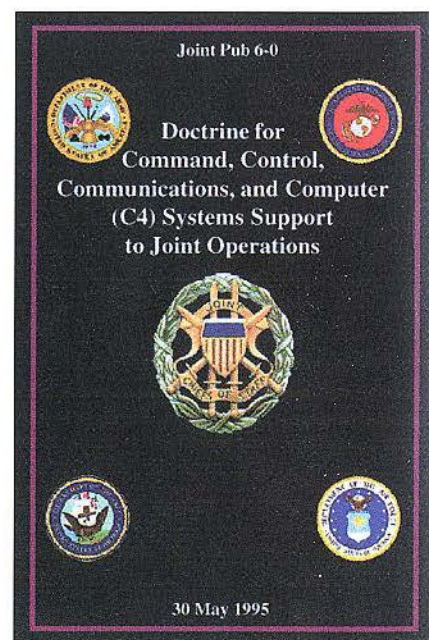
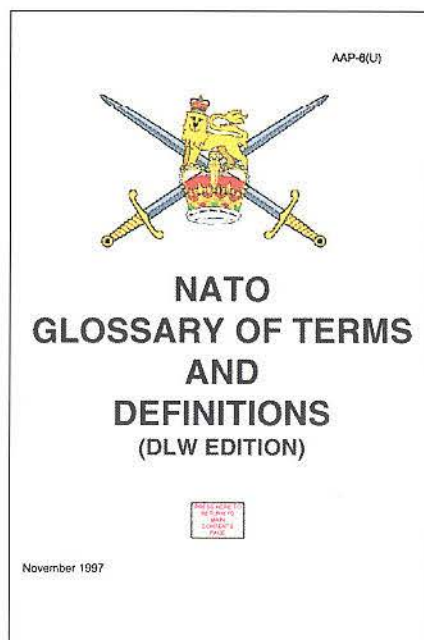
Still on the subject of **systems**, let's discuss the various acronyms, starting with **CIS** (Communication and Information Systems) and then moving to **CCIS** or **C2IS**, i.e. Command, Control and Information Systems and to **C4IEWSR**. Well, before looking into their different meanings, the reader should pay attention to the fact that **the transition from the concept of C2 to any other derived concept with a “C base” (C3, C2I, etc.) containing the word “system”, determines the transition to systems... based on IT (Information Technology), i.e. to systems of automatic communication and processing of information.**

Here are some definitions:

- **CIS, Communications and Information Systems:** “Assembly of equipment, methods and procedures, and if necessary personnel, organized so as to accomplish specific information conveyance and processing functions, AAP-6, Nov.1, 1990” (facing page, in the British Directorate of Land Warfare's version); in other words, CIS are automated systems of communication and processing of information;
- **C4S, Command, Control, Communications and Computer**

Systems: “Integrated systems of doctrine, procedures, organizational structures, personnel, equipment, facilities and communications designed to support a commander's exercise of command and control across the range of military operations. Also called **C4 Systems** (USA Joint Pub 6-0 (facing page), approved for inclusion in Joint Pub 1-02) or, more simply “**Both the communications and the computer systems required to implement the command and control process** (USA Joint Pub 6-0); in other words the C4 Systems deal with the automated communication and processing of information.

At this point, it is worthwhile to observe that the two definitions, CIS and C4, refer to analogous concepts. As mentioned at the beginning, the first acronym is preferred by the British, while the second is used by the Americans and is now widely employed by our Service. The reason for this difference could be explained by the fact that, for the Americans, **informatics** is a **Computer Science**, and for the British is an **Information Science**.
Going on with our panoramic





Italian soldiers on patrol during the East Timor mission.

outlook, we see:

- **CCIS or C2IS, Command, Control and Information Systems:** "An integrated system comprised of doctrine, procedures, organizational structures, personnel, equipment, facilities and communications, which provides authorities at all levels **with timely and adequate data** to plan, direct and confront their activities

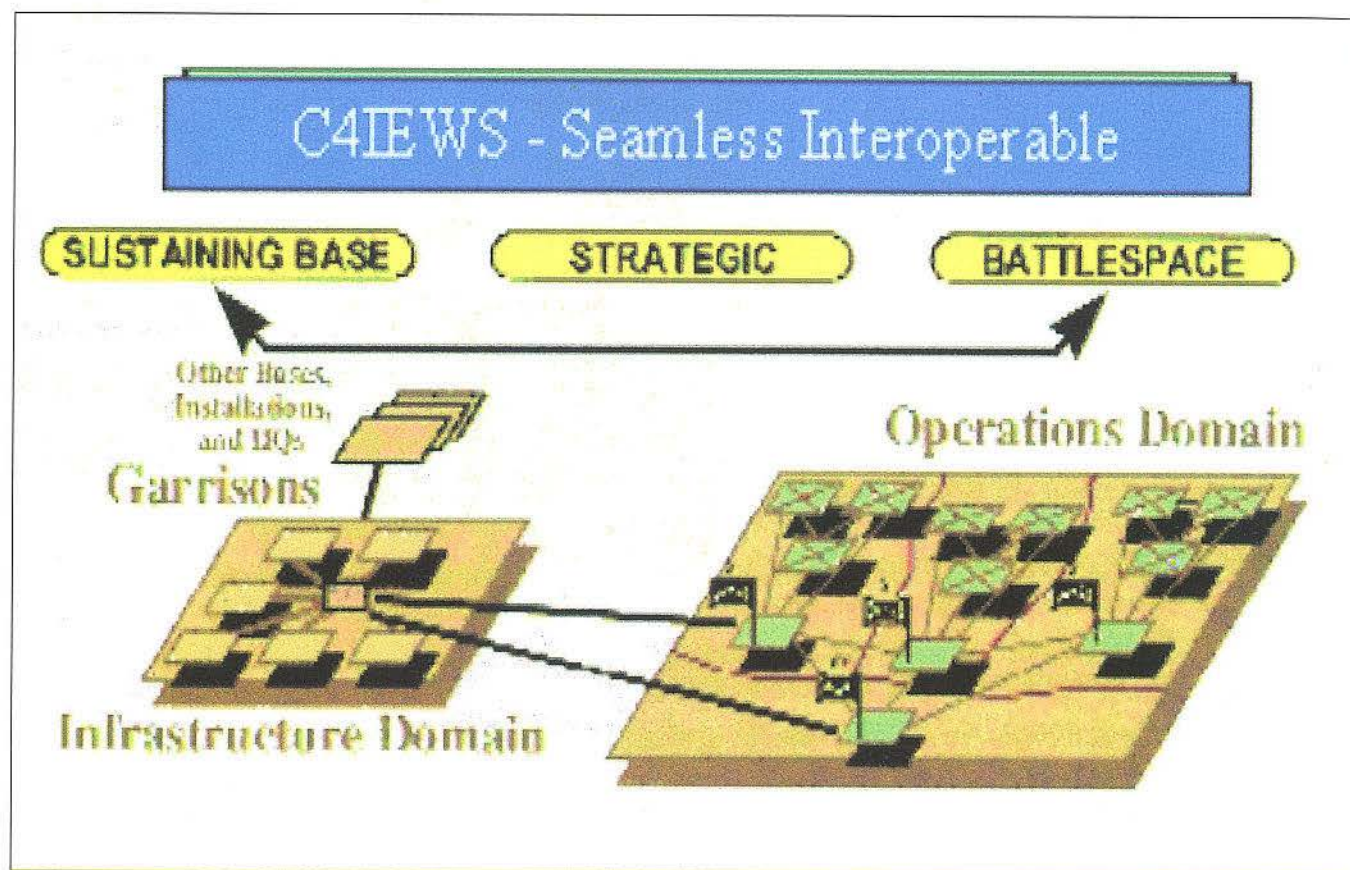
(AAP-6, Sept. 1, 1981). We can notice that this definition is very similar to that of the C2 System, but refers in particular to those specific technical systems which permit the effective treatment and exchange of information.

Due to space limitations, in this article we mention only some essential abbreviations related to Systems:

- **C3: Command, Control and Communications or Command, Control and Consultation;**
- **C3I: Command, Control, Communications and**

FUNDAMENTAL OBJECTIVES OF C4 SYSTEMS

- Produce Unity of Effort
- Exploit Total Force Capabilities
- Property Position Critical Information
- Information Fusion



Information;

- **C4: Command, Control, Communications, Computers.**

Let's dwell for a moment upon the last two acronyms. The reader will note that, precisely owing to what we said about the difference between "Computer Science" and "Information Science", ...the two terms, C3I and C4, ...are equivalent!!!

But things become complicated when the "I" of "Intelligence" is included. Let's see what's next:

- **C3I2: Command, Control, Communications, Information and Intelligence (Systems);**
- **C4I: Command, Control, Communications, Computers and Intelligence (Systems).**

These two acronyms are also equivalent. Then we find the terms made up with the inclusion of other activities or sectors of application (EW, Surveillance and Reconnaissance):

- **C4IEW: Command, Control, Communications, Computers, Intelligence and Electronic**

Warfare (Systems);

- **C4IEWSR: Command, Control, Communications, Computers, Intelligence, Electronic Warfare, Surveillance and Reconnaissance (Systems),** is the last definition and it encloses, in practise, all fields of applications of IT (Information Technology).

Authority levels of C2

By the term "authority levels of C2", in practice we mean the different levels of authority that can be attributed, both within NATO and nationally.

As is well known, the main levels of command authority are the following:

Full Command (FULLCOMD), Operational Command (OPCOM), Tactical Command (TACOM), Operational Control (OPCON), Tactical Control (TACON).

Here we are not going to give the pure and simple definitions of all these terms (if interested, the reader can consult the publications mentioned above); we shall

mention instead the definitions which more directly concern our Service, because of the importance of their concepts in everyday life.

Within NATO, for instance, "Full Command" means "The military authority and responsibility of a superior officer to issue orders to subordinates. It covers every aspect of military operations and administration and exists only within national services (AAP-6)".

This authority, therefore, coincides with that attributed to our *Comandante di Corpo*. As a matter of fact, he is the only commander with Full Command authority (FULLCOMD). His authority is at the highest level, since he is responsible for every aspect of his unit's life and employment, both in peacetime and in operations.

As a consequence, a Commander not responsible for the administrative and logistic sectors is not a Full Commander and, in a wider sense, cannot be defined as a *Comandante di Corpo* (RDM, art. 22).

Operational Control is “The authority delegated to a commander to direct forces assigned so that the commander may accomplish specific missions or tasks which are usually limited by function, time or location; to deploy units concerned, and to retain or assign tactical control of those units. It does not include authority to assign separate employment of components of the units concerned. Neither does it, of itself, include administrative or logistic control (AAP-6)”.

This authority is however a command authority, albeit limited, since it does not imply administrative and logistic responsibilities and is restricted to the accomplishment of the mission or its duration.

The following two examples could be useful for better understanding the essence of the concept:

1st example

- the Commander of a Brigade (e.g. the “Garibaldi” Brigade) in operations has “Full Command” authority (obviously, at his level: we shall go back to this concept later, when we discuss the different command-levels) only on the forces which are normally under his Command (i.e. the forces which constitute the Brigade since peacetime);
- the Commander of the “Garibaldi” Brigade in operations has “Operational Control” authority on the forces assigned to him for his mission in Kosovo; they are different from those which constitute the Brigade in peacetime (e.g. a battalion from the “Folgore” Brigade or a Regiment from another Nation);

2nd example

- the Commander of a single-battalion Regiment (e.g. the 11th Signal Regiment) has “Full Command” authority on his Regiment;
- the Commander of the “Leonessa” Signal battalion has “Operational

**“Responsibility is a unique concept.
It can only reside and inhere in a single individual.
You may share it with others, but your
portion is not diminished.
You may delegate it, but it is still with you.
You may disclaim it, but you cannot divest yourself of it”.**

Control” command authority on his battalion. This Commander is not a “*Comandante di Corpo*”. But he is a **Commander** in every respect and **must not be defined**, as we can read in some publications, as an “operational controller” (an ugly term which should not be used in the Army), but only has the authority to employ his personnel for the achievement of the task assigned to him. The administrative and logistic aspects are a normal responsibility of the Regiment Commander. Commanders in every respect with a similar or different level of authority, according to the circumstances, are also the Company Commanders, Platoon Leaders, Squad Leaders, etc..

We believe it would be useful to close our discussion on C2 and its implications, mentioning some other aspects connected with it, such as, for example, the different **command levels**, which should not be confused with the just described command-authority and with the various levels of **responsibility**.

By command level we mean the position in the chain of command (also known as “C2 chain”) of a given Headquarters (company, battalion, Regiment, Brigade, etc.). At the highest, strategic, military and operational level the Commander exercises his “high command” indirectly, i.e. through his subordinate Commanders. At the lower levels, the Commanders exercise their command directly, leading their men in combat. Between these two levels there are

many others, characterized by the action of conveyance of the higher Commanders’ intents and by the exercise of command towards the subordinate formations or units. Therefore, the command functions change according to the level. In fact, in the Anglo-Saxon world, there is a distinction between *High Command* and *Battle Command*.

Responsibility, at the various command levels, depends both on the level itself and on the level of the command authority attributed to the Commander. When a Commander entrusts a specific responsibility to a subordinate (who, as a rule, has also the responsibility typical of his level, as well as that connected with his command authority), he gives him the necessary authority, but still keeps the responsibility of his level. The subordinate Commander answers to the higher Commander but at any rate does it within the laws, regulations and practices (legitimate power) characteristic of the command-authority level attributed to him (full command, operational command, etc.).

It could be of some help, in grasping the sense of this “absolute concept of responsibility”, to consider a sentence purportedly pronounced by Adm. Rickover, USN, which reminds us that “**to command**” means, first of all, “**being capable of taking on responsibilities**”.

□

* Brigadier General,
Operational Commander,
C4 Infrastructure Group

The non-lethal weapons

by Giovanni Caravelli *



For some years there have been talks of “third wave”, “fourth era”, “cyberwar”, change in the “systematic paradigm” of international relations; “out of the box” visions, meant to emphasize, with a pinch of futurology, a great conceptual phenomenon existing within the evolution of modern society and inside the concept of war and the ways to conduct it.

Experts and analysts of military questions talk about a real Revolution in Military Affairs

(RMA), to point out the radical change occurred in this sector, following the realization of highly sophisticated weapon systems or high-quality technologies. Such capabilities could permit also “covert”, computerized attacks, capable of bringing an entire nation to its knees. Nevertheless, also the famous “system of systems” worked out by Admiral Owens of the US Navy is actually an integrated supersystem of very sophisticated weapons, planned to conduct a

traditional conflict.

But if it is true that “revolution” means in substance a sudden transformation, a drastic replacement of the old by the new, an area of potential “revolutionarity” could be constituted precisely by developments in the field of “non-lethality”. It is a family of technologies that permit to disable, neutralize and block rather than injure, kill or destroy enemy and/or non-combatant troops, or military structures and

The evolution of technology has produced an extraordinary thrust towards instruments capable of disabling, neutralizing and blocking men and assets, without causing irreversible damages.

Non-lethal weapons show prospects of widespread employment together with traditional armaments, but this should not induce us to think that, in the near future, the former could *tout court* replace the latter.

direct conjugation of the use of force with the moral, legal, economic and environmental principles that are at the foundations of the modern western democracies: first of all, the use of force for peace enforcement.

AN ERA OF CONFLICTS

The post bipolar period was, and still is, characterized by the sense of structural collapse that followed the end of the Cold War, when the Superpowers imposed their discipline and almost "scientifically" controlled the impact and size of collective violence around the world.

Even if we are now witnessing a continuous dismemberment of composite Nations, with the proliferation of regimes that are unable to manage their power, on the other hand we also observe the growth of supernational coalitions, which could take on legitimately recognized non-territorial forms. And while the continuation of a "statecentric" international system, i.e., devoid of a true supernational authority, seems secured for the future, today the "non-state" actors and the great centres of power - global corporations, international governmental and non-governmental organizations, transnational movements - have developed with a frequency and effectiveness that

should be watched with attention. The result of this evolution of international relations, parallel to the one formally recognized, consists of an increasing conflict of interests, expectations and disputes, such as may be brought about by the emergence of a different way of planning and, at the same time, of challenging world order, stability, peace and security. This "explosive mixture" is ulteriorly fuelled by a set of potential conditions of instability that can be summarized in:

- marked and increasing economic disparities, especially between the Third World Countries and the economically advanced ones;
- persistent disparity in the distribution of water, food, oil and critical mineral resources;
- continuing political repressions by some governments, which appear reluctant to follow with decision the road of democracy;
- extreme demographic turbulence, deriving from widespread migrations, "explosive" birth-rate in the Third World, dangerous city overpopulation and growing malnutrition, illiteracy and diffusion of epidemic diseases, especially in some African and Asian countries;
- increase of differences and divisions by sects, classes, age, growth, ethnic affinity, religion, political creed, ideological conviction and geographical position, with the consequent augmentation of the "evils" of the century (e.g. alienation and anomie).

These conditions undoubtedly produce and nourish injustice, real or only perceived, deep-felt resentment and antagonism between peoples and nations and/or blocs of nations that, if not concretely confronted at the world highest decision-making levels, could lead to a dangerous increase in the number of dramatic conflict situations. At this very moment we witness the progressive crumbling of entire African nations, which are a prey to civil wars, apparently

equipment. Starting from simple and relatively harmless materials (rubber bullets, resined blocking nets, disabling gas, etc.), could these non-lethal technologies completely alter the aspects of war and, more in general, the use of force?

Certainly, in the first place, they could increase the alternatives available to the governments and military leaders to intervene in crisis situations and would permit, moreover, a simpler and more

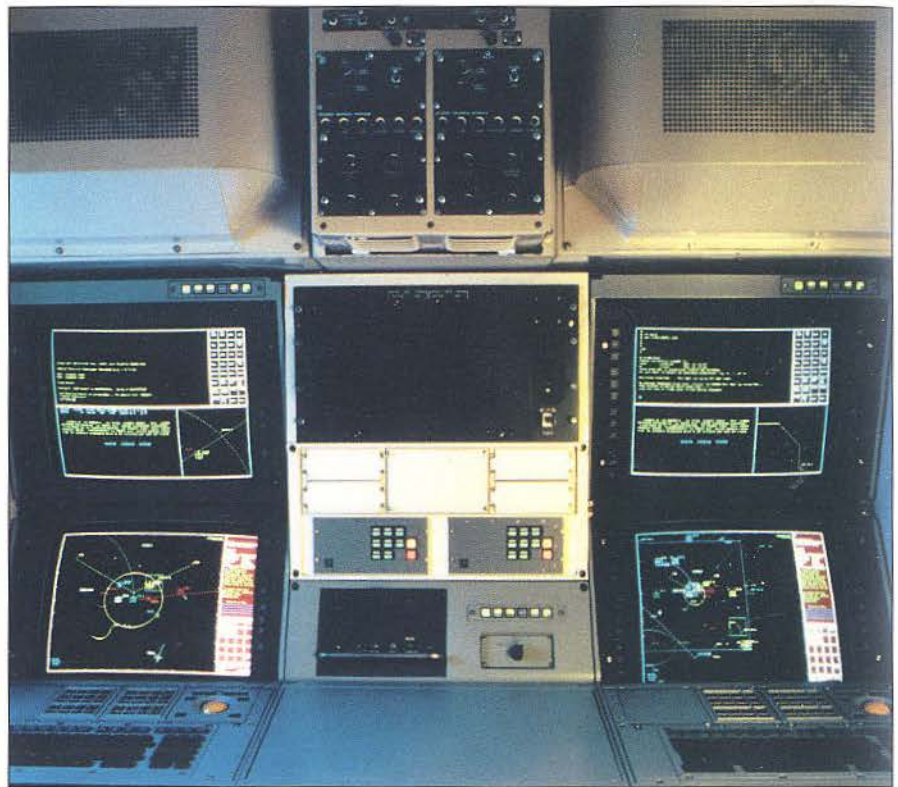
outside any concrete control and possible solution.

THE DEVELOPMENT OF NON-LETHAL WEAPONS

On the global scenario that I have just outlined, the non-lethal weapons (NLW) could represent an effective tool for meeting the complex challenges that arise especially within the sphere of other-than-war operations, as well as in the recent tendency to find credible alternatives to anti-personnel mines, because an increasing number of Nations refuse to employ them. The term "non-lethal" should be understood as a function of the intention: zero-mortality and no permanent damage are the two extremes which are not in the range of objectives that one wants to achieve with such weapons.

At this point, one spontaneously asks: what is the real reason for developing non-lethal weapons?

The most direct and immediate answer is: the soldier. In substance, there is an increasingly impellent necessity to supply the modern combatant with the instruments that enable him to carry out his task, overcoming the problem of physically destroying the adversary and his structures. But it is necessary to go beyond that: in fact, today's soldier, engaged in difficult peace operations, owing to the significance and consequences of his actions has assumed an importance much greater than he had in a classic war. As a matter of fact, I would say he has assumed a crucial importance, because of his possibility of graduating the "response" to the contingent and innumerable situations that he could have to face, the outcome of which often have also a politico-strategic effect. From this point of



view, the present equipment of lethal weapons does not allow much flexibility.

Clearly, today we face a new concept as regards war-waging or, more in general, crisis-management.

Our soldiers face new situations, environments asymmetrical and totally different from each other, which do not exclude discouraging situations and may present challenges never experienced before. It is therefore important for the Commanders to have at their disposal a new range of "instruments", in order to face the crises - especially in Peacekeeping (PK) and humanitarian aid operations - in a more "humane" and, at the same time, more efficient way; while always keeping adequate force-protection capabilities. The most recent PK operations - Somalia, Bosnia, Kosovo - prove it.

But other scenarios of equal complexity are appearing and will have to be taken in greater consideration. In fact, examining the evolutive process of the global community, one can

observe that there is an increasing movement of large masses of people from Nation to Nation and, within each Nation, towards the cities. Also these movements contribute to produce a more and more asymmetrical environment. Urbanization, especially in the western world, combined with the growing importance of "non-state" actors (terrorist groups, intranational forces, etc.), increases the possibility that the Armed Forces, and the Army above all, could be called to support the Police forces, in controlling the territory and maintaining public order. In a more and more built-up environment, where our operational tasks - that only a few years ago were almost unthinkable - entail a more frequent and direct interaction with the civilians, often accompanied by an extensive media coverage, our soldiers must have a better understanding of the situation and, above all, be able to make a complex evaluation of the possibilities they have to employ force.

In this new environment, fire power, or the threat to use it, may

no longer be sufficient (for a long time to come) for a basic solution of all crises and/or problems.

The higher-level Commanders must face a new type of public sensitiveness and a constant, often pitiless, critical examination, both concerning the correct employment of the military instrument as tool of "national power", no more understood as a projection of force for expansionist and utilitarian ends, but as an expression of foreign policy and national security, for controlling and managing crises and for strengthening international peace and stability. The Commanders on the field must be aware of these new sensitivities and prepare an absolutely controllable military force. The Commanders of the minor units must apply the directions and deriving orders with good sense, in circumstances often full of uncertainties and danger.

Throughout history, the changes in culture and technology have affected the characteristics of military force and the way it is employed. These changes are an effort to optimize its employment according to a new vision of the conduct of operations.

As I mentioned before, the incremented interactions between military units and populations have become a fundamental feature of the present operational environment, which will likely remain the basic element of the foreseeable future. Two factors justify this forecast:

- the spreading of urban culture inside the industrialized countries and also the expansion of many preindustrial and emerging societies of the Third World constitute a world-level example of the growth of populations and migrations. The prevalence of urbanization in many crisis regions of the planet engenders a potential for large and vulnerable groups of non-combatant civilians, who must be reached and controlled in the possible strifes in which the military forces could be engaged;
- the Armed Forces increasingly

carry out their tasks in the complex operational environment of "military operations other than war" (MOOTW), a category that includes missions of humanitarian aid, cooperation in disasters, evacuation of non-combatants and various types of peace-support operations. Some MOOTW scenarios include the presence of paramilitary forces, armed factions and/or criminal/terroristic elements, which represent an uncertain but constant threat to our forces. In such circumstances the mission of the military forces envisages "preventive" tasks, meaning that the military units perform a function of constant presence on the territory and control of the single elements and/or factions, in order to keep them from carrying out absolutely unwanted actions, such as triggering-off riots, attacks, violences with ethnic or sexual background, etc. Sometimes the rough elements mingle with the generally innocent and unwitting local population, while in other circumstances, groups of local people may revolt against the military units and take an active part in the acts of violence.

The various factions, the levels of violence and the latent threat to the mission could change frequently and with very little forewarning. In such circumstances, the identity of the possible "enemies" is uncertain and the employment of lethal force for purposes other than self-defence could be drastically and sternly limited by the Rules of Engagement (ROE) or by the evaluation made by the Commanders in the area.

Clearly, the non-lethal weapons should never be deployed without a conventional lethal force. They increase but do not replace the "lethal force"; as a matter of fact, it is indeed the lethal capability in our possession that gives credibility to the employment of

non-lethal weapons, making them even more effective. It is true that this double availability must not be an "overload", or a limitation for the Commanders. In short, the Commanders must be in a position to deploy and employ non-lethal systems without giving up other conventional offensive and defensive capabilities and options. In substance, the concepts of mobility, resistance, sustainability of the forces must not be negatively modified by the presence of non-lethal systems.

Next to the principle of the non-lethal (or soft-kill) weapons' complementarity, we find the fundamental one, which can be summed up in the fact that any effect produced by them must be reversible. The closely interconnected concepts of "reversibility" and "effect duration" are in fact very important: I would say that they are the fundamental concepts of "non-lethality". In border-line cases, and despite the best intentions, it could happen that the employment of non-lethal weapons, precisely because of the circumstances, had an effect different from the one technically indicated. In other words, on the battlefield, or during a particular operation, there is no absolute guarantee that non-lethality will be the final outcome of the employment of these arms. It is therefore evident that the conceptual objective and the realization effort are aimed at maximizing precisely the "humanitarian" aspect of these weapon systems.

The soft-kill weapons are explicitly realized and employed, first of all, and as minimum effect, to discourage and, as maximum effect, to disable personnel and/or materials, minimizing human losses and unwanted damages to structures and environment. They bring flexibility to the combat and increase the protection of the unit, because the friendly troops can anyhow engage objectives that constitute a threat, keeping an

extremely low risk of civilian and non-combatant losses, as well as of collateral damages.

From the historical point of view, the use of non-lethal weapons is not new. As a matter of fact, in the past the military forces have already used non-lethal means to influence the behaviour of populations and nations, in order to initially weaken and subsequently defeat them with conventional weapons. Examples of classic non-lethal means are: show of potential force, physical obstacles, noise to create and increase psychological effects, smoke and fog bombs to cover operations or to neutralize the enemy surveillance, control and guidance systems. These are examples that constitute a remarkable basis of experience, both for future operations and for the evolutionary process of development of these weapons.

The involvement of the military potential to solve crises has traditionally entailed the employment of lethal force, or the declared implicit or explicit threat to use it. The military units are in fact organized, trained and equipped for this purpose. A force armed only with traditional weapons has two options: threaten to use the lethal force or apply it. Such limitation generates a "critical" vulnerability that the adversary could rapidly find out and exploit to his own advantage. The "non-lethal" capabilities, on the contrary, provide a wider range of choices which increases, but does not replace, the traditional lethal forces.

The option of resorting to lethal force must therefore always be available, when the Commander deems it to be more appropriate and/or necessary in order to carry out his mission. One should make this concept very clear in order to dispel any doubt: the existence of non-lethal capabilities does not represent a potential factor for expecting "a non-lethal conflict" and completely unrealizable anticipations. Unfortunately, non-

combatant and civilian casualties will continue to be the regrettable but often inevitable outcome of the use of military force, even if soft-kill weapons are available.

This principle, closely connected with that which considers non-lethal weapons as an "incremental and flexibility factor" of the lethal force, is essential for planning and carrying out any operation that envisages the employment of non-lethal capabilities, especially as regards the preparation of the ROEs.

In short, the main advantages deriving from the availability and employment of non-lethal systems can be summarized as follows:

- the Commanders can have a more humane behaviour, coherent with the political and social implications implicit in peace-support operations;
- the possibility of employing non-lethal weapons permits to assume a more active attitude, and give a quicker and more effective response, being well aware that there will be no irreparable damages and injuries. But there is also the clear perception that one can have a better control of the situation, avoiding its reaching the very dangerous point where it is necessary to employ the lethal force to end a conflict which could have got almost out of control;
- tendentially, the non-lethal weapons appear less provocative;
- the contingent necessity of resorting to lethal forces, after having employed non-lethal weapons with scarce results, would be perceived with less doubts and restraints;
- non-lethal weapons can facilitate a more rapid stabilization after incidents, reducing the hostility of the populations and collateral damages.

Another very important concept, connected with the employment of soft-kill weapons, is their "social

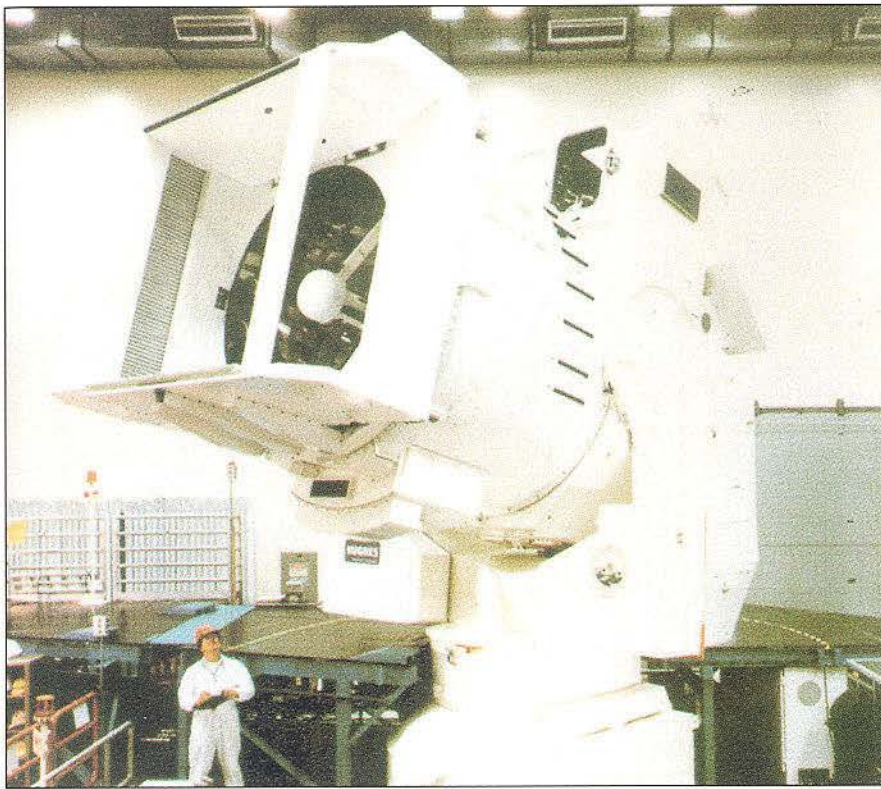
acceptability" and concerns both the local population and the entire international community. In fact, the decision to employ force in defence of international security and national interests, and also how this force is exercised, is generally the object of extensive examination and public debate. An analysis of whether to employ or not to employ non-lethal weapons geometrically increases the number of the available options. The basic problem is that the effects of the non-lethal weapons should be generally acceptable, both by our society and by the international community.

The purpose of the non-lethal weapons is that of augmenting the Commanders' possibilities of carrying out all the missions envisaged along the range of military actions. The most recent military operations - especially the peace-support ones - gravitate on the lower part of this range, where the ROEs are very restrictive. The non-lethal weapons meet precisely the particular requirements and needs of this low-intensity environment. They provide instruments to the single soldier, to the squad and to the unit, that permit to anticipate and/or answer possible provocations - without increasing the levels of tension - with means more appropriate than those realized for the employment of lethal forces.

The core capabilities of non-lethal weapons must envisage flexible means/systems of action/response in order to protect the friendly forces and/or affect the actions of the potential enemies and non-combatants. These objectives can be achieved without resorting to lethal force and in such a way as to minimize collateral damages. Such core capabilities, together with the effects of soft-kill weapons, fall within two main categories: antipersonnel and antimaterial.

Antipersonnel Capabilities

Considering that this non-lethal



Many laser weapons are considered "soft-kill".

planning and conduct of military missions must understand that "non-lethal operations" cannot exist.

The physical limitations of the present non-lethal weapons are: their limited range, their short-time effect and the relative ease with which expert fighters can thwart them. On the other hand, some of the non-lethal capabilities could also be deadly, if not correctly applied.

The tactical limitations concern the loss of the crucial moment for achieving the mission, during the possible transition from non-lethal to lethal force.

The limitations will be overcome only through a clear representation of the objectives and capabilities of the non-lethal systems while, from the operational viewpoint, continuous training and an ever increasing and positive field experience will produce a greater familiarity in the use of the systems.

SOME LESSONS LEARNED

The employment of soft-kill weapons, also at experimental level, especially by units of the US Armed Forces on various operational theatres, has already supplied important indications, not only on their operational effectiveness but particularly on their employment.

First of all, it emerged that the use of non-lethal options must be based on the principle of a gradual and proportionate response, preferring the employment of the minimum force necessary to counter the threat.

On the other hand, the attempt to control and determine every aspect of the employment of non-lethal forces can produce remarkable drawbacks for the Commanders on the field. For example, it is an

capability is aimed at permitting the application of military force with a very limited risk of casualties among the civilians and the non-combatants and, in some cases, also among the enemy forces, the field of research and development is very wide, up to the point of even envisaging means capable of influencing the behaviour and the activities of a potentially hostile crowd or regaining control of a rioting mob. The main capabilities required of antipersonnel non-lethal weapons are: to disable personnel in a non-permanent way, prevent personnel from entering a given area (through physical barriers or other systems), capture persons, clear occupied infrastructure.

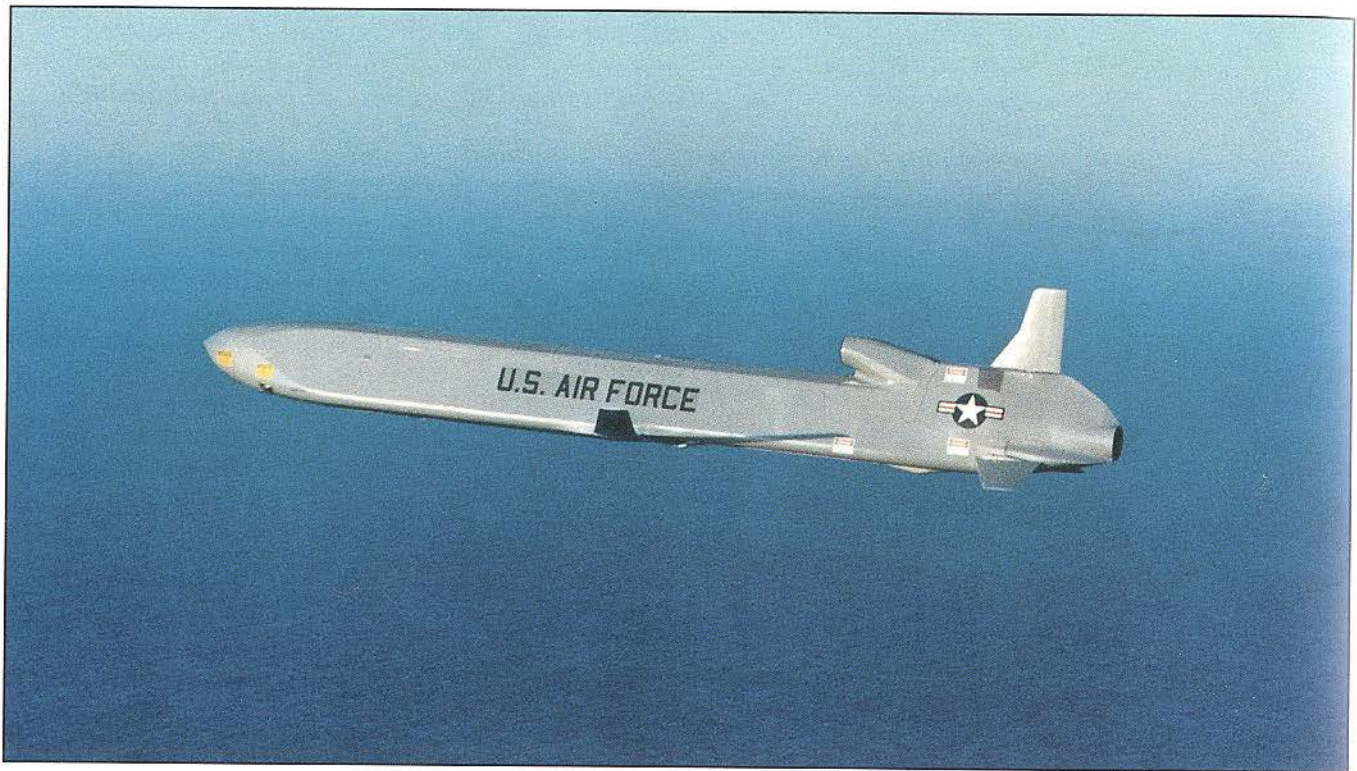
Antimaterial Capabilities

These capabilities must permit to render materials, structures and equipment useless without causing their destruction. This allows the employment of military forces in those circumstances in which the level of indeterminacy is such that the employment of lethal force could prove counterproductive.

They envisage the capability of preventing the access of vehicles to an area and of neutralizing systems and structures.

Considering these indications and directions, it can be stated that the employment of non-lethal weapons could meet - and therefore one should try to overcome - three substantial types of limits: conceptual, physical and tactical.

The conceptual limitation is due to the fact that the political leaders and the media could be unable to understand, or could misinterpret, the correct application of the non-lethal weapons to the total range of military operations. The wrong perception that the non-lethal weapons permit to conduct and/or carry on wars and MOOTWs without losses, could induce misleading and conflictual expectations among political and military leaders. Such conflictuality could translate into a greater vulnerability of the military forces, due to ROEs incompatible and incoherent with the mission assigned. All the political and military leaders involved in the



The employment of missiles for delivering chemical and biological agents permits "surgical" interventions.

ascertained fact that in Somalia the ROEs of the US contingent caused an arbitrary and inapplicable distinction between the situations that justified the recourse to lethal force and those where different means could be applied, and with lower mortality. The contradictions of some ROEs were evident when the employment of non-lethal means for controlling crowds was contemplated in cases related to the employment of lethal force. In fact, the soldiers asked themselves why they should employ non-lethal weapons in general, when they had to wait for a warrant to employ lethal force before being allowed to shoot a "beanbag"(1).

Experience has also evidenced that the use of particular means produces excessive and dangerous reactions. The viscous immobilizing foams are a well-known case: they were employed only as lethal force, owing to the severe sense of suffocation they caused. Because of this, the foams

were removed from the list of the non-lethal weapons available to the US forces in Somalia.

In substance it is indispensable to work out ROEs that permit the use of force without solution of continuity, envisioning a gradual response related to the types of threat, and allowing the Commanders to employ non-lethal weapons to boost flexibility, deterrence and reaction to uncertain situations.

In view of this, it is fundamental that the decision to employ non-lethal weapons be delegated to the lowest possible tactical level. The decision must be taken as quickly as possible, because the levels of violence in situations of extreme fluidity can sway in both directions along the theoretic axis of the employment of force. For instance, a platoon leader could order the employment of non-lethal weapons, successively decide to react with lethal arms against a sudden and increasing threat, and finally re-employ non-lethal means to respond to hostile but unarmed individuals. Taken for granted that non-lethal weapons are a component in the scale of the

Commanders' gradual response, it is equally evident that such systems do not represent the "solution of solutions", a panacea in the hands of the Commanders for solving every problem in the present operational scenarios. They should rather be employed in close connection and synergy with psychological operations, intelligence activities, public information and CIMIC.

CONCLUSIVE REMARKS

The introduction of non-lethal technologies will probably raise a series of questions that comprise all sectors of a nation. The main issues could be.

- strategic questions: will non-lethal weapons project an image of force or of weakness, of aggressiveness or tranquillity? Will they be regarded as seriously as lethal weapons are? Will they diminish or increase the propensity towards violence of the users and their adversaries? Will they allow the adversaries to repair more easily the damages they could have possibly suffered? Will they foster an

- escalation or a reduction of violence? Will they expand or restrict the decisionmakers' flexibility? Will they have an appreciable influence on national interests (meaning that national interests are often defined in terms of access to "critical" materials and resources needed to support large military instruments)? Will they augment or diminish the acceptance of independent international police or security forces (e.g. under UN authority) if these were mainly equipped with non-lethal weapons?
- military questions: will non-lethal weapons increase or reduce the effectiveness of military missions? Will they be particularly easy or difficult to use? Will they reduce or increase the risk of friendly casualties? Will they weaken the fighting spirit or attitude? Will they promote or hinder interservice cooperation? Will changes be necessary as concerns military missions and rules, force structure, operational doctrine and training? Will they weigh on the Nation's ability to mobilize the resources necessary to respond to large-scale emergencies? Will they create special necessities for intelligence, effective engagement and post-engagement damage evaluation?
 - diplomatic questions: will non-lethal weapons be useful tools in negotiations? Will they provide sufficient leverage to obtain concessions? Will they influence the negotiation strategies? Will they be considered positive or negative propaganda? Will they contribute to open or to isolate diplomacy?
 - political questions: will non-lethal weapons influence public opinion for international interventions? Will they weigh on national will and cohesion? Will they affect relations among coalitions (compatibility of equipment, burden sharing, transfer of technologies, etc.)?
 - economic questions: will non-

lethal-weapons have a considerable effect on the economic growth and on industrial compatibility? Will they have a measurable impact on the expenses for Defence, as complements and substitutes of lethal weapons? Will they facilitate the transfer of technologies from the military to the commercial sector? Will they influence the dependence on foreign technologic resources? What is their export potential?

- internal questions: will non-lethal weapons weigh on the incidence, nature, extent of organized criminality and internal terrorism? Will they have particular repercussions if they were to fall in the hands of criminal groups? Will they affect the citizens' civil liberties? In the police's hands, will they influence the procedures of law-enforcement or the definition of "excessive force"? Will they have an impact on the acceptability and legality of employing the Armed Forces in internal activities? Could they contribute to a mortality typical of police states?

The legitimization and the probable and hoped-for effectiveness of "non-lethality" will very probably depend on the answers to these and also to other crucial questions, especially for the remarkable potential that these technologies offer in view of a revolutionary transformation in the conduct of "military affairs".

Although non lethal weapons were deployed by US troops in Somalia, Bosnia and Haiti, they have not yet been given adequate evidence and importance either by the military world or by public opinion. A greater attention to these issues in effectively defining their real military capabilities should be developed within the military institution itself.

The cold war was a period of transition from the modern to the post-modern era, with particular regard to the questions of national

security. It was a period in which public opinion regularly saw that action was replaced by rhetoric, substance by symbolism, reality by image. What I mean is that the confrontation of the two blocs implied a complicated diplomatic, strategic and military play, where every geographically located action was to be counterbalanced with another by the opposite bloc. The declarations of intentions in themselves came to have the weight and value of an action of strategic importance. In this kind of "blocked" scenario, the non-lethal technologies, which did not correspond to the "philosophy" of the moment, could find no space.

The post cold-war world needs instead a "revolutionary" answer - a radical and strategic distancing from the past - a revolution, regarding no more politics or history but a reality that must be reconstructed, a mentality that must be replanned.

Therefore, as regards "military affairs", the non-lethal systems in the making offer precisely an innovative answer to the requirements of security and control of regional crises. It may appear an utopian argument, but a close analysis will clearly prove that one can gradually introduce them into service, without the overambitious attempt to anticipate the times, but convinced to offer an extremely flexible tool to the contingents engaged in restoring peace and stability in the different areas of crisis.

□

** Lieutenant Colonel,
Office of the Army Chief of Staff*

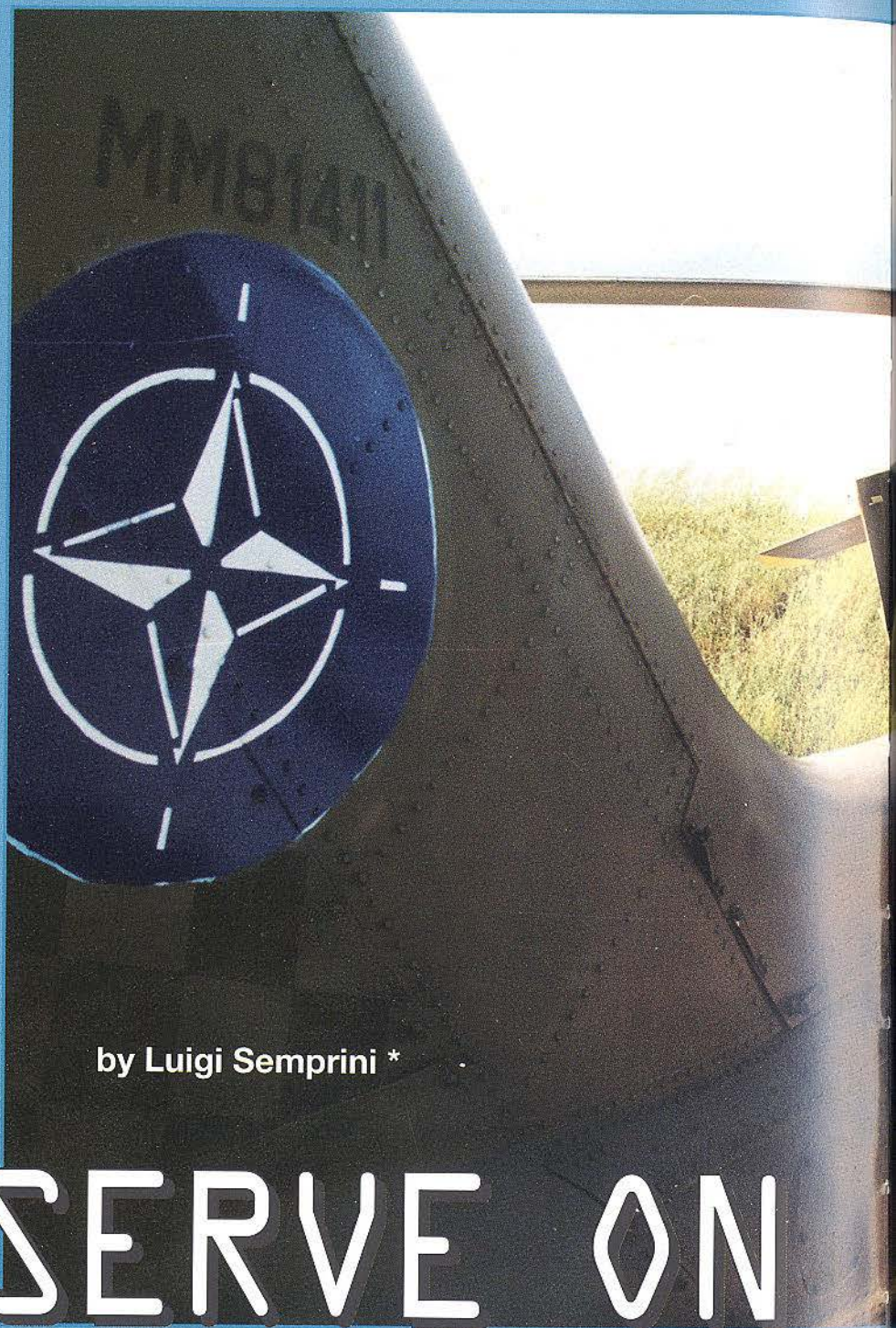
NOTE

(1) The "beanbag" is a particular type of round, whose bullet is a container filled with dry legume pellets. Contrary to rubber bullets, they do not wound and rarely can they injure delicate parts, such as the eyes.

The end of the bipolar world and the gradual disappearance of the mass armies, based on conscription and coercive mobilization, have raised the question of the rapid completion of highly-professional volunteer units. To fulfill its institutional duties, the Italian Army must have at its disposal a well-trained reserve force, sufficient to fill the gaps in the ranks and meet unforeseen requirements.

by Luigi Semprini *

A RESERVE ON A VOLUNTARY BASIS





In the post Cold-War years the risk of a world conflict has diminished, but new tensions, detrimental to the stability and peace of many areas of our planet, have appeared on the international scene. The nature of the threat has changed, and many Countries, including Italy, have adopted new defence models, based on smaller but highly professional

military instruments.

Within this innovative framework, a review of the Army's mobilization system has also become necessary, in view of the new operational options and the more and more important role that man must play in today's Armed Forces. Therefore, a review of the conceptual, functional and organizational approach is needed, together with a

new organization capable of meeting the modern automation requirements using the most advanced technology.

In order to tackle the problem correctly, one should remember that, in the past, large mobilization pools were envisaged, which included the youngest classes discharged to the reserve, which were kept up to date through mandatory refresher-



Recce vehicles disembarking from a transport ship.

training periods.

Mobilization took place in emergency situations, caused almost always by the risk of involvement in a serious armed conflict. It was realized through massive and compulsory recalls to arms, with a scarce selection of the "youngest" reservist, who were employed in the constitution and completion, in very limited periods of time, of numerous operational units, agencies and territorial formations. The arms and the equipment of the units were stored and kept in working order by the so-called Mobilization Depots.

Up to WWI, annual training recalls to arms took place in coincidence with the summer manoeuvres. They lasted 2 to 4 weeks; at times, the reservists were recalled in order to face serious disturbances of public order (1898, 1902, 1904). Dodging reached peaks of 40%.

Between the two world wars, there were only large training recalls in 1932, 1934, 1935, 1937 and 1938; the last peacetime recalls took place in 1954 during the Trieste crisis and in 1964, with the purpose of postponing the drafting age from 20 to 21. During the Cold War, recalls were discontinued, because of budget difficulties, and also not to arouse the apprehension

of a public opinion which tended to perceive them as symptoms of serious international tensions, foreboding a nuclear conflict.

In the past, the expenses for the organization and management of mobilization were rather heavy, but went down after WWII, because the training recalls and mobilization exercises had come to an end. Also the expenses for the acquisition of arms and equipment diminished, since there was plenty of them, as a consequence of the frequent Armed Forces' retrenchments. In fact, in the last decades, the only expenses left were those concerning the maintenance of the arms and equipment stocked at the Mobilization Depots.

From 1953 to 1998, mobilization followed the rules of publication 8/S "Provisional instructions on the Army mobilization" ("provisional" in that it was never completed with the logistic part). Under those rules, an almost completely regional mobilization system was created, which in an emergency made possible to establish new formations (from the framework units), to complete the existing units and to replace the losses suffered in case of armed conflict.

Each "mobilization organization" (command, unit, etc.) determined its own needs, kept the discharged

servicemen "connected" and contacted the Military Districts in order to obtain the necessary reservists. All the organizations concerned with the operation of the system carried out an intense routine work, aimed at setting up the annual mobilization preparations; this activity became complex and laborious in case of important changes in the organization (which, unfortunately, were quite frequent) or when new-generation weapons or systems went into service.

In those circumstances, the innate financial difficulties did not permit to carry out the necessary recalls for the reservists' retraining, nor to verify the readjusted system's validity through mobilization exercises; for the same reason, and because of the massive character of mobilization, the idea of establishing a voluntary reserve (even a reduced one) has always been discarded.

In the imminence of conflicts, there have been cases of "voluntarism" inspired by patriotic spirit, but it was not possible to rely on them for mobilization, considering their aleatory nature.

On the eve of WWI, 340,000 Italian emigrants, many of them reservists, voluntarily returned to their Motherland to fight.

FROM MOBILIZATION TO COMPLETION

Considering the new organization of the Army and its possible operational options, the great mobilizations of the past seem useless, while the careful and timely completion of the existing units remains essential.

Therefore, the massive recalls of roughly trained reservists, meant to multiply the land units, must be replaced by limited but selective recalls of reservists (having the appropriate rank, specialization and

training), aimed at completing units which will have to constitute the most heterogeneous complexes of forces.

The system must fill both the physiological and institutional gaps deriving from an insufficient supply of personnel and the contingent gaps, caused by resignations, medical reasons etc. The former are the most difficult, especially when they concern highly specialized individuals.

The gaps "to be filled" are many and very different: therefore, the number from which to choose must be large, and certainly cannot be limited to the regional environment. Thus, there must be a system capable of directly drawing the necessary elements from the whole national reservists-pool (centralized system), and of completing, in optimal quantitative and qualitative terms, a number of units suitable for carrying out specific missions, in often very atypical environmental and operational situations (versatile system).

The reservists pool will contain all the discharged servicemen, as well as the officers, NCOs and volunteers formerly on active duty and still holding a special status, and the militarized civilians. These personnel constitute the National Reserve Force (FRN). (For other abbreviations, see "Acronyms" box at the end of the article):

All arms and equipment for the recalled servicemen are kept at the units to be completed; therefore, the mobilization depots are suppressed.

As regards completion times, we went from a short 20-day limit to no less than 180 days, always fully complying with our NATO commitments.

The activities for the completion of a section or of all the existing units must start at the first forewarnings of a crisis, by issuing the measures listed in the completion regulations, with the possible changes required by the actual situation. Besides the recalls, these measures could include also norms for voluntary extensions of

Fig. 1

MEASURES FOR THE COMPLETION OF EXISTING COMMANDS, BODIES AND UNITS					
N° (1)	TYPE OF MEASURE	EFFECTS OF THE MEASURES			
		Average age of personnel concerned	Employment readiness of personnel	Appreciation of the measure	Categories of personnel interested in the measure
1	Voluntary extension of conscription for servicemen close to discharge	Very young	Ready employment	High	Reserve Officers Short-Term Volunteers Conscripts
2	"Ad hoc" or general recall of FCV(2)	All ages, depending on category and rank	Ready employment for some; after a short course of generalized training for others	High	Officers and NCOs in auxiliary or reserve positions Discharged short-term volunteers and conscripts
3	Increase in recruitment of volunteers	Very young	Employment at the end of complete training cycle	High	Reserve Officers Short-Term Volunteers
4	Increase in recruitment of conscripts	Very young	Employment at the end of complete training cycle	Scarce	Conscripts
5	Suspension of on-request termination of regular service	Middle and relatively old	Ready employment	Certainly unwelcome	Regular Officers, NCOs and Enlisted Men
6	Suspension of discharge of volunteers and conscripts	Very young	Ready employment	Unwelcome, with the exception of some volunteers	Reserve Officers Short-term Volunteers and conscripts
7	Suspension of retirement for age limits	Elderly	Ready employment	Welcomed by some individuals little inclined to be pensioners	Regular Officers, NCOs and Volunteers
8	Coercive recalls by course/age and for specialists	Young and middle age	Employment at the end of refresher course	Very low	All categories (auxiliary, reserve, discharged)
NOTES: (1) Measures 1, 2 and 3 are based only on voluntariness; the others, in any case, are coercive. (2) For recalls concerning personnel with special skills, to be recruited among civilians, it is necessary to contact COMFOTER, Military Regions and Inspectorates					

service terms, increase in recruitments, discharge freezes, etc. (fig.1). Measures other than recalls are not very suitable for facing unforeseen crises, since they depend upon contingent situations (e.g. inclination to voluntary service). They will have to be adopted, nevertheless, in the extreme case of a serious shortage of reservists.

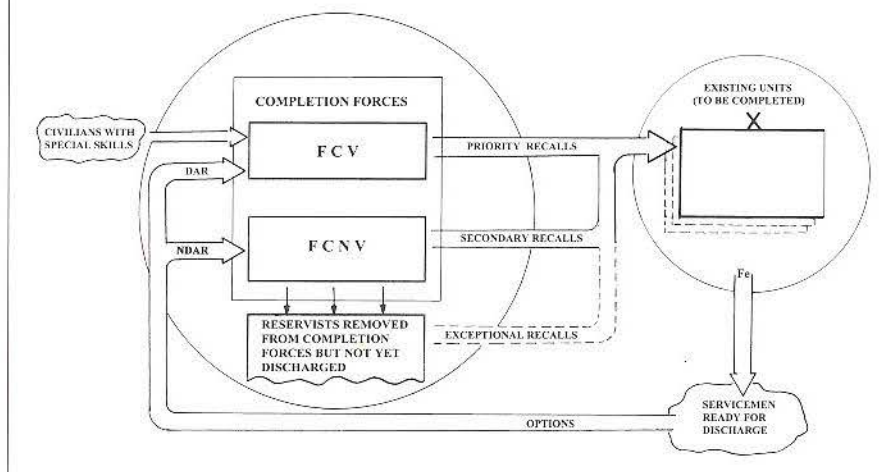
The FRN, in its turn, should be subdivided into two large components: one made up by younger reservists, i.e. the real Completion Force(FC), and another made by older reservists - discharged from the FC - that

would be recalled only on extreme national emergencies (fig.2).

The **FC** should be equal to **TO** - (**Fe+Vc**) considering that:

- **TO** is the established strength;
- **FE** is the actual strength of the existing units;
- **Vc** are the actual gaps, statistically equal to 10% of the established strength.

The completion needs are calculated in relation to the type of gap, we have to fill, the type of crisis we have to face and the time available to confront both. This time, albeit now much longer as compared with the past limits,



could nevertheless turn out to be scarce in some circumstances, in particular when it is difficult to find elements with special professional qualifications, or when unexpected training needs come up, owing to a wrong evaluation of the reservists' training level.

THE COMPLETION FORCE - RESERVOIR/FLYWHEEL

The FC reservists are contained in a *Reservoir/Flywheel (S/V)*, automatically managed so as to meet the completion requirements relevant to all categories, ranks, specializations and jobs (fig.3). The S/V includes two compartments:

- a **main compartment**, that includes the DAR reservists, who are the volunteer component of the FC;
- a **secondary compartment** formed by NDAR reservists.

The reservists of the main component are required to confirm their DAR status at least once a year; the NDAR reservists can move to DAR status at any time, and join the main S/V compartment.

This division into compartments, purely formal, permits to have the numerical and qualitative perception of the FC readily available for the most urgent recalls.

Within each compartment the reservists are assigned to special "cells" according to their category

(officers, NCOs, troops), rank (lieutenant, captain, etc.), Branch/Corps (infantry, artillery, etc.) specialization (tank driver, surveyor, informatics assistant, etc.) and operational readiness (high or scarce). The indication of the operational readiness level is necessary also in order to schedule the training recalls. The auxiliary-category officers, NCOs and enlisted men formerly on regular duty, and the civilian reservists designated as officers, NCOs and enlisted men after a militarization course, automatically join the volunteer component of the FC.

It would be desirable to fill all the gaps with DAR reservists (optimal solution) and have recourse to recalls of NDAR reservists or other alternative measures (discharge freezes, exceptional recruitments, etc.) only in situations of serious emergency.

The S/V will be capable of carrying out its task only through a "minute by minute" updating, obtained by means of a permanent "recording" of every reservist in the two compartments; this means that each updating must be the starting point of successive elaborations, according to an intuitive and logic chain process.

But the possibilities offered by informatics permit to activate a FASC process and therefore to organize and carry out, in real time, the activities for the actual

completion of the units. As a matter of fact, if the **output** is the completion of the existing units, the **input** will be provided by the reservists available in the FC, whose number could rapidly be determined in relation to discharges, DAR, actual strength and other conditioning events.

The system will permit to know in real time, for each category, rank, job and specialization, the possibility to fill the gaps in the existing units in relation to the establishment tables, and to determine:

- elements and times necessary to fill the residual gaps through compulsory measures;
- global and individual training-requirements;
- convenience or opportunity of starting again the search within the S/V, modifying the requirements of the necessary personnel (without changing the DATA BASE).

The system, besides evaluating and updating data without need of frequent controls, will adjust the preparations for completion to the different requirements that could come up both during the annual review or in particular crisis situations. It will also be capable of arranging the completions by modules.

The existing Command/Organization/Units are responsible for issuing - through computerized cards - the elements necessary to form the data base of the system's software, i.e. the number and type of their gaps (V_i and V_c) and the data concerning the discharged personnel that can be assigned to the FC (for instance, those who have become unfit for military duty must be excluded). Each card must include: Rank, Branch or Corps, personal data, DAR or NDAR, job (assailant, artillery pointer, sapper, etc.), courses attended (informatics, foreign languages, etc.) and any other useful data (professional qualification, activities carried out, etc.).

Once the DATABASE is electronically acquired, the system

processes the data and gives its indications on the possibility of completion of the units, in both figures and percentages. Obviously, one can try to increase these possibilities by repeating the electronic search after reducing the DATABASE.

As shown at fig.4, the Army Staff, having acquired the DATABASE, decides on the most convenient "input" to fill the gaps in units X, Y, and Z, fixing the possible priorities of the necessary measures.

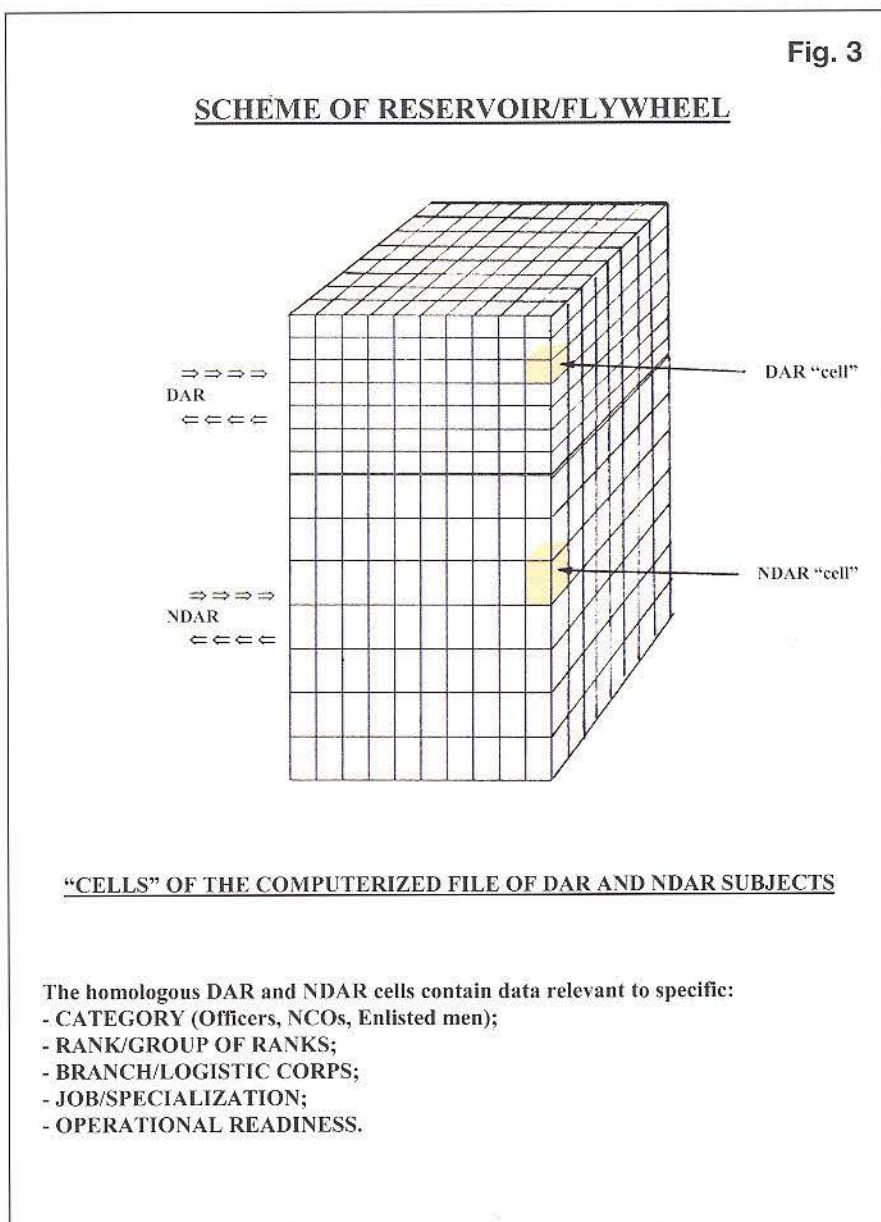
If the number of DAR is sufficient to fill all the gaps, the response will be technical, and provided by the automated data processing; if, on the contrary, the adoption of coercing measures is necessary (recall of NDAR reservists, compulsory extension of service, etc.), the solution will have to be of a techno/political nature.

THE ORGANIZATIONAL PROBLEM

According to Law no.25/1997, the organization for the completion of the Armed Forces must be based on the following criteria:

- **voluntariness:** availability of motivated personnel, reliable for their psycho-physical attitude and operational readiness, immediately employable;
- **quality:** the recalled serviceman should be employed in the job carried out during his military service, or in case there were several, in the one where he showed the best performance;
- **simplicity:** the envisaged procedures must be clear, unequivocal, realistic and highly automated, therefore easily implemented.

Considering the criteria listed above and the structure of the central and peripheral organs of the Conscription, Recruitment and Mobilization sector, it seems convenient to centralize the completion organization by automatizing its main functions (DAR monitoring, S/V, preparations,



etc.). For this purpose, it is necessary to redefine the functions of various bodies - through organizational and techno-functional changes - overcoming the clear-cut separation between managerial, executive and inspective bodies. In particular, the new organization should assign:

- managerial functions (plus some executive ones) to the Army Staff, the Carabinieri General Command, COMFOTER and the Inspectorates;
- executive-only functions to the Military Districts, Unit Hqs. and Carabinieri Stations;
- inspective functions to the

Military Region Commands;

- support functions to the Conscription, Recruitment and Mobilization Directorate, the Military Ordinariate, the High Council of Military Magistracy, the municipal administrations (for the reservists' personal data), the Branch/Corps Associations.

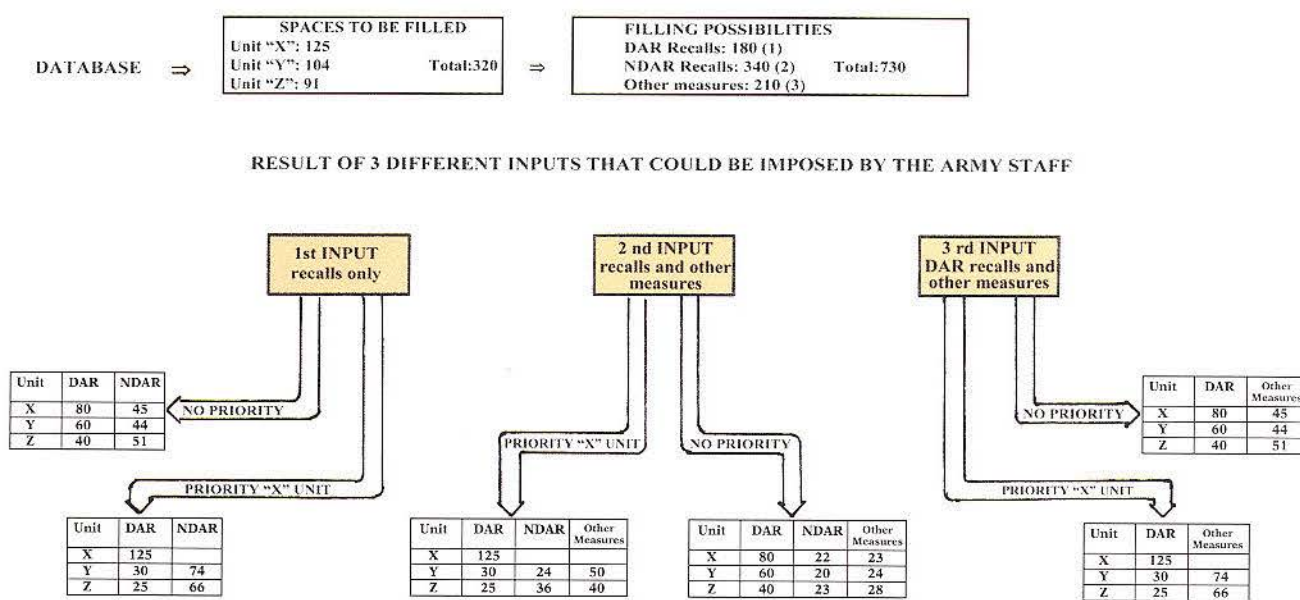
The Carabinieri General Command is interested in the completion organization, both for the information and recall activities concerning all reservists and for the completion of the Carabinieri units.

Among the completion activities, a preeminent role is played by the Army Staff, the Branch and

Fig. 4

EXAMPLE OF AUTOMATED ELABORATION OF COMPLETION DATA

COMPLETION SUBJECT: CORPORAL/CAVALRY/AMD-CAR LEADER/HIGH READINESS



NOTES:

- (1) Priority must always be given to reservists who don't need refresher training.
- (2) Coercive recalls which could be alternative to other measures.
- (3) A frequently adopted measure is the voluntary or coercive extension of conscription.

Logistic-Corps Units and the Military Districts (in that order).

The functional centralization conforms to the present tendency of creating, for each territorial macrofunction, a unitary national organization, avoiding the subdivision by geographical areas.

The reliability of the completion system depends largely on the correct and continuous DAR monitoring, divided in two phases (fig.5):

- survey on the number and type of DAR personnel, conducted by the units as regards the servicemen about to be discharged, and by the Military Districts for those already discharged, who will be given the opportunity to confirm, cancel or offer their DAR;
- elaboration of DAR data by the Army Staff and Military Districts. They determine the number and type of the reservists available to the FC and "place" them in the appropriate "cells" of the two S/V compartments.

While the Army Staff directly

elaborates the data on the volunteer reservists (inclusions, confirmations, cancellations due to renunciations or unfitness, etc.), the Military Districts work on the data concerning the non-volunteer reservists, transmitting them to the Army Staff for the subsequent updating of the S/V.

Each monitoring activity ends with the updating of the reservists' records by the Military Districts, which also send any useful data on the FC to their Military Region Command, to the appropriate Carabinieri local Commands, to the local Section of the Branch/Corps Associations and to the interested municipal administrations.

THE RESERVISTS' TRAINING

In order to be a full member of the FC, a reservists must be well prepared to carry out his task. His training level is mainly affected by the time elapsed since his discharge or the last training recall, as well as by the significant changes occurred,

during the same period, at the unit to which the reservist is destined. This is particularly true if the changes concern weapon systems or very sophisticated equipment.

When the time elapsed is short (less than two years) and the changes occurred are minor, the reservist, upon his operational recall, can directly join the unit of destination, where he improves his readiness through very short training periods; otherwise, he should attend a 2-3 week preliminary course at a Branch School or another military Institute.

In order to realize a *generalized updating* of the Completion Force, and especially of its volunteer component, the training activities must be conducted, without interruptions, also during the periods of international "fair weather".

If possible, recalls for this training should be scheduled by unit and organized by modules, taking into account the subjects available for the various tasks and the training requirements. Each training cycle



Italian personnel and equipment engaged in a NATO mission.

the indication of the gaps they are going to fill in the units.

The annual arrangements are worked out on the basis of the technical data provided by the S/V, of the completion assumptions as well as of political and social considerations, especially when coercive measures are programmed. The arrangements' scope and complexity vary according to the numerical/qualitative ratio between the number of reservists in the S/V and the gaps to fill, while their reliability essentially depends on how accurately the DAR subjects and the

existing gaps were monitored.

The arrangements are worked out by the Army Staff, which avails itself of the data provided by COMFOTER, the Inspectorates and the Military Districts, taking into account the availability of funds and other secondary factors.

In particular, the Military Districts' tasks are:

- transmission of the recalled reservists' data and relevant destination units to the Carabinieri Commands and to the local sections of the Branch/Corps Associations;

- dispatch the **Destination Notice** to all recalled reservists. The notice will also include the reporting modalities and the indication of the Agency where they must go for medical examinations;
- inform reservists of the annual training recalls for generalized updating;
- prepare the **Recall Cards** to be sent at the moment of the recalling order. All information relevant to destination and recall can be sent by any modern means of communication (E-mail, telephone, mobile radio, etc.), provided that an assurance of reception is guaranteed.

The arrangements for completion are valid for one year, at the end of which they must be updated according to the possible variations occurred (i.e. organizational changes, different locations, variations in the denomination of Commands/Agencies/Units, etc.).

In times of international calm, the soundness of the various measures should be controlled through periodic exercises and, in case of anomalies or difficulties, their causes must immediately be ascertained and the necessary corrections adopted.

At the first forewarnings of a crisis which could entail a military intervention, the Army Staff (fig.6):

- designates the units to be employed and evaluates the possible development of the mission in time and space, as well as the difficulties deriving from the distance between the crisis area and the national territory, the weather and environment conditions of the region, the satellite coverage, etc.;
- verifies the suitability of the measures envisaged in the arrangements and, if necessary, improves them;
- initiates the actions for the completion of the units concerned,

pointing out the exact starting time and the time available to complete the whole operation;

- issues the training directives for the "ad hoc" training.

The completion could follow different steps, according to its duration: if there is no urgency, there will be tests aimed at verifying full validity of the completion arrangements, detailed activities for "targeted" updating, officers' courses, etc.; in case of urgency, only the essential activities will be carried out, envisaging, for instance, to carry out the "targeted" updating at the units to be completed, and dispatch the recall cards by courier.

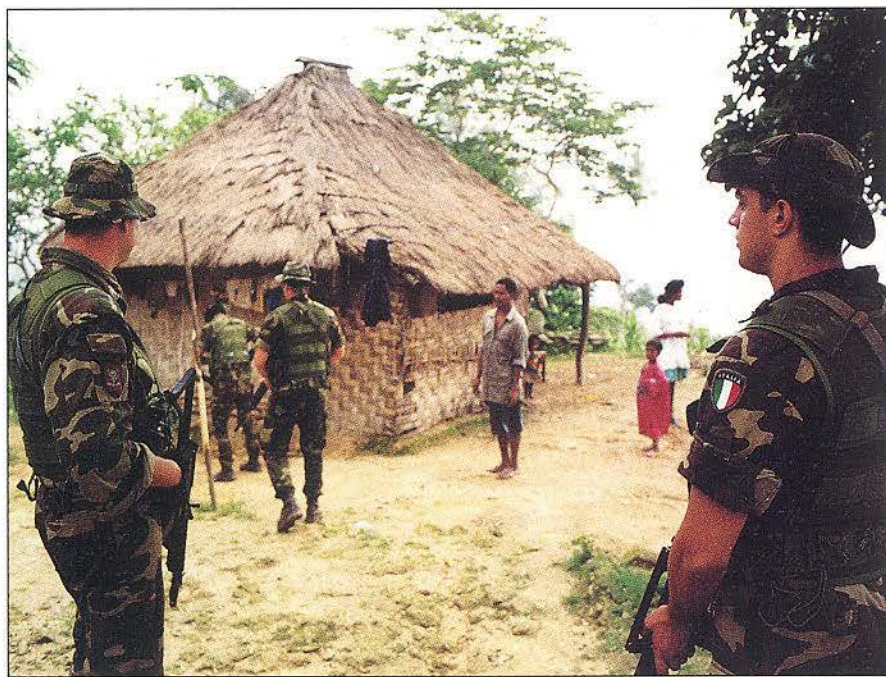
Any inconvenience in the course of completion must be reported and removed immediately; in this respect, the activity of the Military Regions and Military Districts is particularly important, since they have to control the flow of reservists from their areas of responsibility to the units.

VOLUNTARY RESERVISTS-NEEDS AND OPPORTUNITIES

The DAR reservists' recall to arms aims at guaranteeing the ready and certain availability of efficient and well prepared men. In the past, with coercive mobilizations, this was something one could not expect to achieve easily.

The Voluntary Reservist formula, albeit foreign to the Italian military tradition, can have the hoped-for effects only if some motivational and socio-economical conditions are realized.

The motivational drive towards DAR normally arises in subjects who, during their military service, lived through useful and exciting experiences on the human, ethical and practical plane in efficient units with a healthy esprit de corps and guided, of course, by



charismatic and professional Commanders. This drive can be fostered by the Associations, if they are capable of becoming great aggregation poles of former servicemen and an exclusive interface between the Army and the civilian world.

The **Branch/Corps/Category** Associations, besides favouring the socio-cultural interests of their members, should keep in contact with all discharged servicemen, in order to have them become a compact group, willing to join the voluntary reserve. The best opportunities for this activity are the traditional national meetings, demonstrations of new weapon systems, important training activities, visits to units engaged in peace missions, etc.

An important contribution in this direction can be given by **the press**, especially the specialized one (*Rivista Militare*, etc.) through periodical publications for the voluntary reservists, dealing with their training and other subjects of interest (new weapons, organizational innovations, humanitarian laws, NBC threat, medical aid, etc.) One can presume, in fact, that a voluntary reservist would be very interested in updating and improving his

military knowledge. **Radio and TV** can also provide a similar contribution with interviews, debates, talks with the audience, etc.

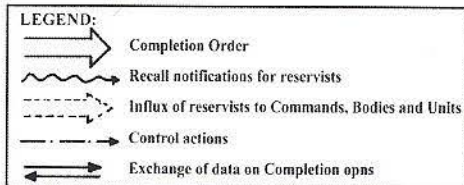
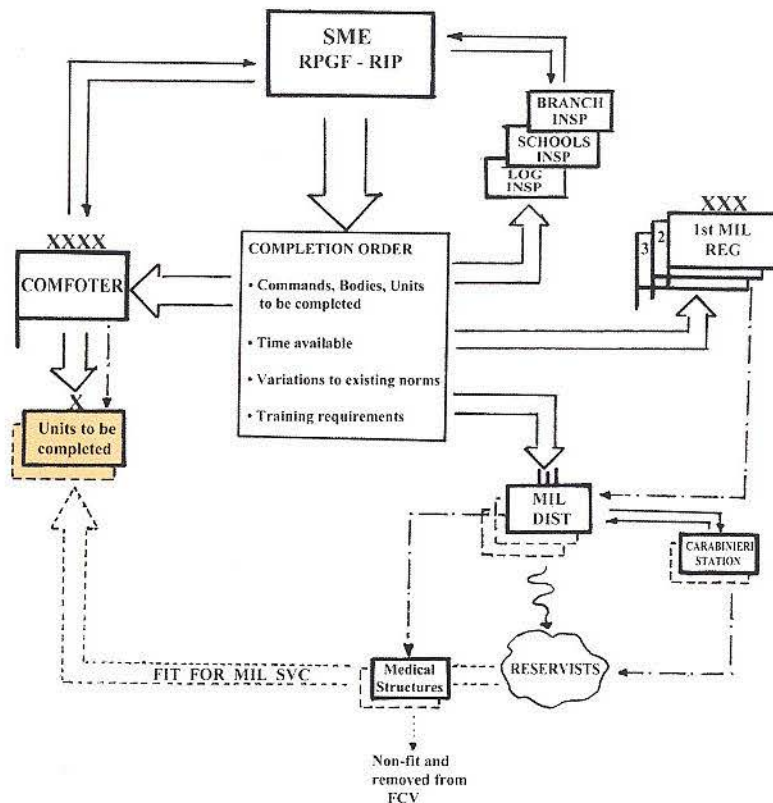
But it must also be considered that the voluntary reservists, being active subjects in the completion process, accept a "status" which entails obligations, risks and hardships, and are therefore entitled to financial compensations and social guarantees, as well as to some other benefits, be they normative or of any other kind.

The financial compensation should not be considered a pay but rather a reward, and could take the form of an annual or biennial **voluntary service reward**, proportionate to the seniority attained as voluntary reservist; the rewards could be given by a military agency or even by the reservists' employers, who would not only be reimbursed, but indeed gratified for their cooperation (in the U.K. this type of reward has been in use for decades).

The reward for voluntary service cannot succeed in encouraging the DAR reservists unless appropriate social guarantees are provided for. First among them, **the interruption of the reservists' employment upon their recall**.

This problem does not concern

Fig. 6



civil servants (who are fully guaranteed) but worries those engaged in private sectors: they may fear that being DAR reservists may turn into a handicap for the preservation of their jobs (especially in medium-small companies); the independent workers, professionals and businessmen could be reluctant to declare themselves as DAR, fearing that the absences caused by their recalls could jeopardize the competitiveness of their firms or professions. These remarkable impediments can be removed only by equitable laws involving some financial burdens.

As is the case with officers and

NCOs in the auxiliary and reserve status, also the voluntary-reservist enlisted men could be considered for **promotions** in relation to their duty as recalled personnel. Similarly, the voluntary reservists could be offered the possibility of frequenting military clubs and resorts, shopping at Commissary stores and military pharmacies, receiving medical assistance at the military medical installations, etc. Finally, it would be rather convenient to grant special travel reductions to participate in the annual meeting of the Branch/Corps Associations, or to attend important training exercises and military celebrations.

Beyond the intrinsic financial advantages, which very often are short-lived, their very existence gives the voluntary reservist the proud feeling of being still "part of the system".

NORMATIVE ADJUSTMENTS

The new system for completing the units needs an **organic legislative support** capable of assuring its operation.

The existing, and still valid, legal regulations must be integrated with other rules concerning the voluntary reserve; in other words, there must be a normative symbiosis aimed at regulating:

- constitution and tasks of the Completion Force, and categories of reservists destined to join it (volunteers or not);
- training activities (recalls to arms) necessary to keep the FC at an acceptable operational standard;
- “status” of the voluntary reservists and their social protection (preservation of jobs); voluntary service rewards;
- remuneration of the reservists employed in private sectors (professionals, tradesmen, businessmen, etc.);

As we mentioned before, the social and economical norms concerning the reservists engaged in private sectors are extremely important for the good operation of the completion system.

As regards the preservation of jobs, the law presently in force (no. 370/1955) deals with the subject, and in some cases refers to the most favourable norms contained in the labour contracts; little or nothing is said about the facilitations for the employers willing to hire voluntary reservists, whose absences could interfere with the company's production; in other words, there should be an adequate compensation for their "willingness to be willing".

This normative gap could be filled by envisaging, as a compensation, tax reductions, facilitations in contracts with the government, etc.

In any case, very effective laws on this subject can be borrowed from other countries (United Kingdom, France, etc.) where the voluntary reserve has been a fact for a long time.

Despite the efforts to adopt the clearest possible norms, the possibility of legal disputes cannot be ruled out, considering the great number of different relations existing among the various subjects involved in the completion activity; suffice it to think of the relationship between the voluntary reservist and the Defence Administration, or between the latter and private employers. In order to settle any possible controversy, a **Board of Arbitrators** should be appointed, directly subordinate to the Prime Minister's Office.

This atypical legal instrument could take the form of a Consolidation Act which, as is known, facilitates the consultation and interpretation of the norms.

CONCLUSIVE REMARKS

In order to perform its institutional tasks, today's Army must have a reserve of men ready to meet the most unexpected requirements of completion of the existing units, i.e. a Completion Force that, albeit reduced in comparison with the great masses mobilized in the past, must be quantitatively composite and well trained, considering the wide range of jobs - many of which highly specialized - envisaged by the organization of the operational land units.

The FC can be described as the sum of different subjects - selected by category, rank, branch, job, specialization, ecc. - sufficient to fill the institutional and contingent gaps, and to face any need of rotation and/or replacement of losses.

The percentage of DAR subjects present in the S/V can be a measure of the reliability of the FC; if it does not reach a 100% optimum, at least it

ACRONYMS		
COMFOTER	Comando delle Forze Terrestri	Land Forces Command
DAR	Disponibile Al Richiamo	Voluntary Reservist
DM	Distretto Militare	Military District
FASC	Formazione Automatizzata dei Soggetti di Completamento	Automated Training of Completion Subjects
FC	Forze di Completamento	Completion Forces
FCV	Forze di Completamento Volontarie	Voluntary Completion Forces
FCNV	Forze di Completamento Non Volontarie	Non-Voluntary Completion Forces
Fe	Forza effettiva	Actual Strength
FRN	Forze di Riserva Nazionali	National Reserve Forces
NDAR	Non Disponibile Al Richiamo	Non-Voluntary Reservist
SME-RPGF	Stato Maggiore Esercito - Reparto Programmaz. Generale Finanziaria	Army Staff, Financial Plans Division
SME-RIP	Stato Maggiore Esercito - Reparto Impiego del Personale	Army Staff, Personnel Employment Division
S/V	Serbatoio / Volano	Reservoir / Flywheel
TO	Tabelle Organiche	Establishment Tables
Vc	Vuoi Contingenti	Contingent Gaps
Vi	Vuoi Istituzionali	Institutional Gaps
VFB	Volontari a Ferma Breve	Short-Term Volunteers
VSP	Volontari in Servizio Permanente	Regular Volunteers

should equal the number of voluntary reservists averagely needed in the most recurring types of crisis (Somalia, Bosnia, Kosovo).

But this objective is illusive unless the appropriate conditions for the DAR options are created, through the provision of financial benefits and social guarantees for the voluntary reservists and compensation for the employers compelled to accept the damages deriving from the reservist's recalls.

Furthermore, the reservist should never be mixed up in bureaucratic complications or defaults that could discourage his DAR attitude. On the contrary, he must be constantly and

exhaustively informed about the problems connected with his engagement (work, family, etc.).

The completion system of the existing units must be supported by a constantly renewed and trained FC, made operational by the three key-organizations (Army Staff, Military Districts and existing Units), implementing, correctly and flexibly, the completion arrangements.

This solution, which is atypical if we compare it with the traditional structural schemes, facilitates the information dialogue between the key elements of the system and the reciprocal control of data. Besides, it permits to adopt relatively simple

solutions and to find and correct in time anomalies and malfunctions, obtaining moreover savings in the system's management.

The heaviest functional burden falls upon the Army Staff, which is responsible for the general direction and control, the coordination of the activities of the Military Districts spread throughout the Country, the direct management of the S/V and the annual planning of the completions.

At peripheral level, the Military Districts are, as in the past, the vital point of the system, since they monitor the DAR reservists residing in their area, update their records, issue the recall orders - according to the completion arrangements - and direct the recalled servicemen to their units after the medical examinations. All these complex activities can only be entrusted to highly professional personnel.

On the contrary, the Units' activity is reduced, since they are no more required to produce their own completion arrangements, but are only responsible for the correct and timely transmission of the data concerning the discharged personnel and the difficult-to-fill gaps in their organization.



The functions concerning the completion of the units (from DAR monitoring to the completion arrangements) can easily be automated, and can interact thanks to the centralized and tripolar configuration of the system.

The automation must be based on a very accurate software, if we want to achieve optimal results as regards the numerical and qualitative level of the FC and the rational use of the resources provided by the voluntary reserve. Even the most trivial defect in the software can thwart the many

organizational and promotional efforts made in order to improve the quality of the completions and to encourage the establishment of a voluntary reserve.

The completion system can be credible only if it puts "the right reservist" in "the right place". This means that the reservist must have all the requisites prescribed, including a good and updated preparation.

The general updating of the discharged servicemen requires a great organizational effort, owing to the difficulty of reconciling two conflicting aspects of the problem: the heavy training burden deriving from the continuous evolution of equipment, weapon systems and employment procedures, and the need to avoid long and frequent training recalls that could damage the reservist's working activity, and lead him to give up his DAR. It is therefore advisable to schedule short and intense training periods, counting on the voluntary reservist's interest in improving his learning and on the possibility of supporting



Kosovo: Italian M113 APC passing a British military convoy on the road to Pec.



An APC shortly before its departure from a military base in Kosovo.

his training with modern teaching aids and advanced communication means.

Like many other innovative processes, also that regarding the completion of the existing units requires the employment of advanced technology (informatics, cybernetics, telecommunications, etc.), which is indispensable for speeding up the acquisition, updating, verification and exchange of data, in order to simplify the procedures and increase the training and informative effectiveness.

It is easy to understand, for instance, the importance of e-mail to take care of the large communication flow that will run between the key elements of the system, or the usefulness of an Internet site that could be contacted by the appendices of the system and by all the FC reservists. Radio and TV are also very important, in that they can be employed to encourage DAR, propagate useful information and support the training activities.

As regards the financial requirements for completion, acquisition and storage of

equipment and weapons, they can be considered close to zero, while relatively high are those for training (including completion exercises), incentives and compensations for the reservists; the credibility of the new system will depend also on the adequacy of its financial support.

The functional requisites desired for the system correspond to the efficiency requirements common to all modern operational systems, and therefore they should be aligned to similar systems of the state organization and of the Defence in particular.

The demands for regulations on the matter can be met by connecting the norms already in force for the old mobilization with the new rules, taking into account the peculiar aspects of the voluntary reserve, as well as its socio-economic implications.

The latter, among other things, refer to the reward for voluntary service, to the elimination of the compensation inequalities existing among the different categories of recalled personnel (public employees, private workers, professionals, businessmen, etc.) and to the relationship between the voluntary reservists and the Defence Administration.

This normative picture can be valid for all Services, prescinding from the technical solution adopted by each of them for completing their units and formations.

In short, the system outlined here is one of the last goals we have to reach in order to complete the process aimed at giving a fully professional character to the Italian Army.

□

** Lieutenant General (ret.)*



Kosovo: "Centauro" armoured car on patrol.



NOVEMBER
2000

National Unity

June 22, 2000 was prize-giving day for the "**Premio Giornalistico Esercito**", the National Contest promoted by "Rivista Militare" among the authors of articles and reports published by nationally diffused media (press, radio and TV).

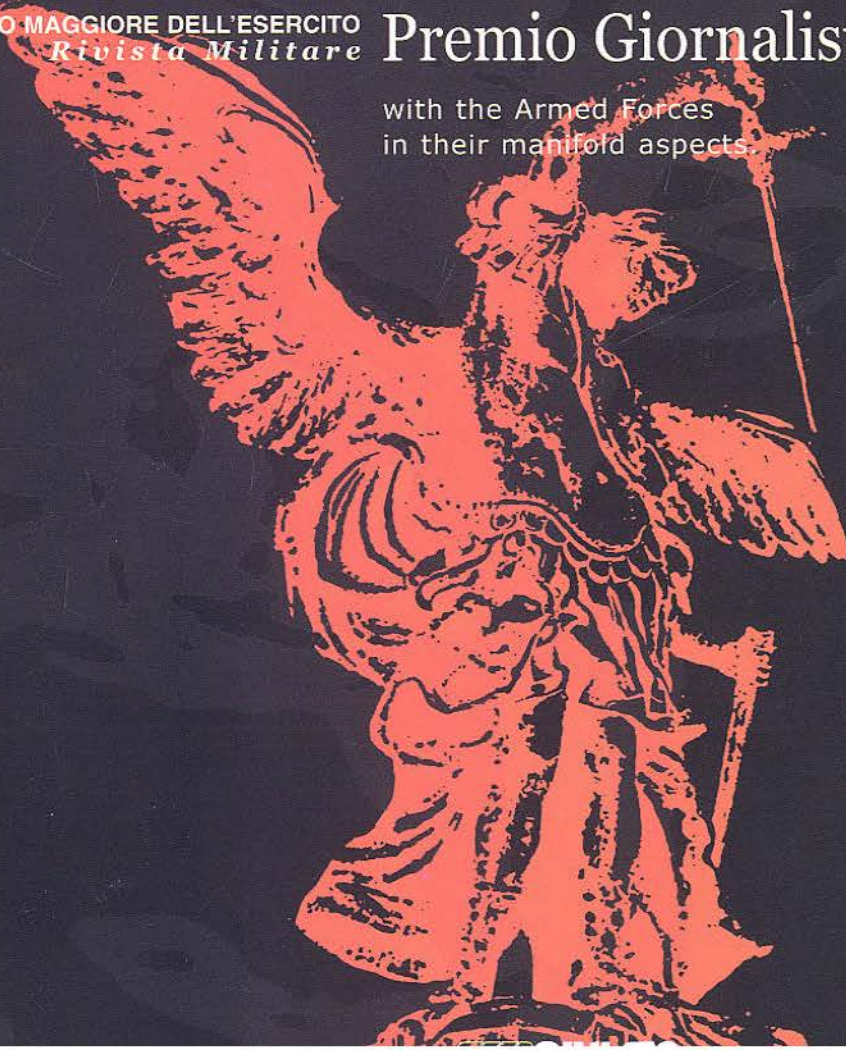
The ceremony took place in the beautiful setting of Castel Sant'Angelo National Museum.

The Board considered 500 press and radio/TV articles, published or broadcast from January 1 to October 31, 1999 dealing

STATO MAGGIORE DELL'ESERCITO
Rivista Militare

Premio Giornalistico Esercito

with the Armed Forces
in their manifold aspects.



Premio Giornalistico Esercito

Presentations:

- Brig. Gen. Giovanni CERBO, Editor of Rivista Militare: "Outcome and Aims of the Contest";
- Prof. Crescenzo FIORE, Chairman of the Evaluation Board: "Relations Between Army and Media";
- Lt. Gen. Francesco CERVONI, Army Chief of Staff: "Final Remarks".

Moderator: Dr. Alessandra CANALE



Dailies



1st Prize
Mario
Pirani
editorialist of
"La Repubblica"

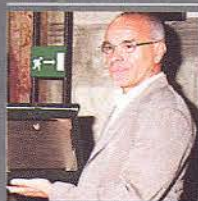


2st Prize
Andrea
NICASTRO
journalist of
"Corriere della Sera"

for 4 articles on the Resistance published on "la Repubblica":
"Cephalonia, a Forgotten Massacre" - Sept.14, 1999;
"When Did the Resistance Begin?" - Sept.27, 1999;
"Resistance: A Story to be Rewritten" - Oct.11, 1999;
"Not Everybody Went Home on That Sept.8" - Oct.25, 1999.

for the article:
"OSCE, All Take Lessons From the Italians" - Corriere della Sera, Jan.3, 1999.

Periodicals



1st Prize
Giuseppe
NICOTRI
journalist of
"L'Espresso"

for the article:
"Traveling With the Italian Soldiers Through the Desert of the Mass Graves" - "L'Espresso", June 1999.



2st Prize
Pino
BUONGIORNO
journalist of
"Panorama"

for the article:
"Ready for Peace. Operation Joint Guardian" - "Panorama", June 1999.

TV



1st Prize
Ennio
REMONDINO
RAI Correspondent in Belgrade

for his long and intense journalistic activity during the war in Kosovo.



2st Prize
Tony
CAPUOZZO
TG5 Correspondent

for his reportages from Kosovo and Macedonia; in particular for the report on the role of NATO's Extraction Force, broadcast on Jan.24, 1999 in the special feature "Sunday Story".



Board of Examiners:

- Prof. Crescenzo FIORE: Chairman;
- B. Gen. Giovanni CERBO: Deputy Chairman;
- Dr. Danilo MORIERO: Member;
- Dr. Giuseppe MAZZEI: Member;
- Capt. Claudio FERRARO: Member;
- Dr. Annarita LAURENZI: Secretary.

Special Prize



Lucio CARACCILO
editorialist of
"La Repubblica"

for the article
"How To Wage
a War" -
"La Repubblica",
May 23, 1999.



Michele NONES
Contributor to
"Il Sole 24 Ore"

for the article
"The Urgency
of a European
Military Pole" -
"Il Sole 24 Ore",
July 20, 1999.



**Alberto CHIARA
Annachiara VALLE**
journalists of
"Famiglia Cristiana"

for the article
"The Choice" -
"Famiglia Cristiana",
September 1999.



Gennaro DE STEFANO
journalist of "Oggi"

for the article
"Private Rosa,
Quick March!
You'll Fight
Wearing a Skirt".
"Oggi", June 1999.



Daniela TAGLIAFICO
Editor of "TG2
Dossier"

Guido BARENDSON
TG2 journalist
for the special TG2
feature
"The Price of
Peace" -
June 16, 1999.



Antonio AFFAITATI
war correspondent of
RAI Radio Journal

for his numerous
radio reports
from the Balkans
and from Moscow.

*The posthumously
awarded prize was
received by the
Journalist's daughter,
Ms. Cristiana AFFAITATI.*





Special Mention



Mario RIGONI STERN

for the article
*"But for Us Old
 Fellows it Was
 a Voice in the
 Desert..."*,
"Alto Adige".
 May 21, 1999.

*The prize was received
 by the author's niece,
 Ms. Giuliana Rigoni
 Stern*



Francobaldo CHIOCCI

for the article
*"Sabaudia
 Guarding
 our Sky"*,
"Il Giornale".
 May 23, 1999.



Giordana CANTI

for the article
*"The «Alpini»"
 a World of
 Myths,
 civilization and
 ideals"*,
"Rivista Militare".
 no.5/99



Ornella ROTA

for the article
*"International
 Cooperation"*,
"Rivista Militare".
 no.4/99



Fabio MINI

for the article
*"Saving
 Private Ryan"*,
*"Panorama
 Difesa"*, no.1/99



Lorenzo MONTERSOLI
 editor of the special
 report *"Good-bye,
 conscription!"*
 included in
 Channel 5
 programme
"Verissimo"
 (Feb.2, 1999)
 conducted by
Cristina PARODI.

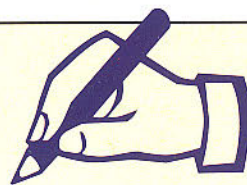
*The prizes were
 received by
 Dr. Marco CORRIAS,
 chief of "Verissimo"
 editorial office in Rome.*



Alberto CIAPPARONI
Massimo GAMBA
 editors of the
 special Report
*"«Nonnismo»,
 But not Only"*,
 included in RTL's
 radio programme
"Indignato speciale"
 (Sep. 5, 1999)
 conducted by
Andrea PAMPARANA.



SOMMAIRE INHALT RESUMEN



L'Armée de Terre pour l'Europe et pour le Pays. Le soutien logistique d'adhérence, **par Claudio Graziano (p. 2).**

La «Division pour l'Europe» représente l'objectif principal de la planification des forces. Dans ce cadre la logistique d'adhérence a une importance fondamentale par donner de la crédibilité au nouveau système de sûreté européen. Aussi pour les Unités logistiques on devra adopter les principes de la modularité et de la flexibilité. Pour cette raison, les deux nouveaux types de Régiments se configureront comme des Unités organiques, mais pas comme des Unités d'emploi, ayant des dimensions en termes de capacités de remplir les tâches leur assignées.

La révolution dans les affaires militaires (1ère partie), **par Pier Paolo Lunelli (p. 16).**

L'expansion toujours plus rapide des nouvelles technologies d'information et de communication est en train de provoquer une révolution de grandes proportions pour ce qui concerne les affaires militaires.

Quels est-ce qu'ils pourront être les effets sur la doctrine et sur les modalités d'emploi de cet instrument? L'Auteur tente une première réponse avec une analyse historique de l'évolution technologique (de XIVème siècle jusqu'aujourd'hui), se réserve de proposer, dans un prochain travail en collection, plusieurs réflexions sur les perspectives des Forces Armées Italiennes.

Le partage de l'éther, **par Ornella Rota (p. 28).**

La Conférence mondiale sur les radiocommunications, qu'il y a eu le printemps passé à Istanbul, a examiné, à niveau global, la situation des bandes de fréquence, avec le but d'élaborer un plan pour une meilleure

utilisation des services dans l'espace et sur la terre. Il est un problème grand et difficile qui concerne aussi le compart militaire, exposé à observation pour un éventuel coupe de la gamme de fréquences en faveur des activités civiles: disposition que risque de compromettre pas seulement l'opérativité des Forces Armées mais aussi les communications d'État.

Suisse. Les nouvelles Forces Armées. Entrevue au Général de Division Hans-Ulrich Scherrer, **par Enrico Magnani (p. 34).**

La participation de l'Armée de Terre suisse à des opérations de «peace keeping» en Kossove et en Macédoine est en ligne avec la nouvelle stratégie de «sûreté à travers la coopération», qu'a conduit la confédération, en octobre de 1996, à approuver le programme «Partenariat pour la paix». L'expérience faite a donné d'importants stimulations pour ce qui concerne la doctrine et l'organisation. Il y a en cours un processus de restructuration, fondé sur des critères de multifonctionnalité, modularité, rapidité et interopérabilité, selon la commune volonté de la coopération internationale. Mais ce processus devra de toute façon, sauvegarder le principe traditionnel de la «milice», qui s'est révélé efficace même au dehors du contexte purement militaire, et garantir la disponibilité d'une suffisante force de réserve.

République Slovaque: la nouvelle Armée de Terre. Entrevue au Majeur Général Dusan Humeny, **par Enrico Magnani (p. 42).**

L'Armée de Terre slovaque a commencé à parcourir le chemin d'une radicale réconfiguration après la séparation politique et, par conséquent, militaire de la République Tchèque. Ce projet prévoit, avant la fin de 2001, le resserrement des forces à 12 200 militaires et 1 800 civiles: un instrument agile, souple et adéquat à la nécessité de remplir activement les

emplois internationaux.

Europe unie, entre réalité et rêve, **par Luigi Campagna (p. 48).**

L'histoire des peuples et des Nations de l'Occident a été caractérisée par un lent et tourmenté chemin. Aujourd'hui nous nous trouvons en face de beaucoup de diversités et de contradictions qui semblent éloigner l'objectif d'une authentique unité politique, économique, militaire et sociale de l'Europe. On a passé les poteaux du processus d'unification, de la naissance de la CEE, de la construction d'organes communautaires et intergouvernementaux, jusqu'à la stipulation des Traités de Maastricht et d'Amsterdam. Mais il y a encore beaucoup de poteaux qu'on doit passer.

Le problème d'organisation de l'instrument militaire, **par Sauro Baistrocchi (p. 56).**

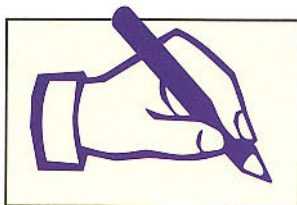
Le difficile processus de rationalisation de l'instrument terrestre implique la nécessité de découvrir ses possibilités de développement d'organisation. Le changement, si réalisé avec une idée moderne, pourra garantir à l'Armée de Terre une majeure efficacité en termes opérationnels et fonctionnels. Le point central de cette situation de renouvellement est le capital humain, qu'il faut valoriser surtout pour ce qui concerne les motifs et la requalification professionnelle.

“Les relations internationales du nouveau millénaire: l'impact de la mondialisation”, **par Carlo Bellinzona (p. 70).**

L'économie a toujours eu un rôle capital dans le développement de l'histoire. Avec le nouveau millénaire un nouveau défi semble apparaître à l'horizon: la mondialisation économique. Cet article décrit la nouvelle situation géostratégique et les perspectives futures, en particulier à l'égard des États-Unis et de l'Europe.

Commandement et Contrôle, **par Angelo Pacifici (p. 78).**

Cet article souligne le problème de la



SOMMAIRE INHALT RESUMEN

terminologie alliée et les relatives sigle liées, en particulier, au thème du «Commandement et Contrôle». Il est un étude de recherche, confrontation et vérification, fait avec des glossaires, des nomenclateurs, des dictionnaires, des publications de l'OTAN et de notre Nation, qui donne des éléments de clarté sur les abréviations et les sigles utilisées dans le langage militaire.

Les armes non letaux.

par Giovanni Caravelli (p. 86).

Les armes non letaux doivent avoir un caractère de réversibilité et doivent pouvoir, même si l'on ne les remplace pas, flanquer les armes traditionnelles. On les subdivise, selon leurs capacités intrinsèques, entre les «armes contrepersonnel» et les «armes contrematériel», avec des caractéristiques d'inaptitude, neutralisation et blocage. En les emploient, on a une particulière importance l'interconnexion avec les opérations psychologiques et d'«intelligence».

Une réserve à base volontaire, par Luigi Semprini (p. 94).

Par accomplir le processus de professionnalisation de l'Armée de Terre italienne, il faut construire un réservoir de forces de réserve auquel puiser par compléter les Unités existantes. Ça veut dire qu'il y a la nécessité d'activer une dense réseau de communication parmi les Commandements/les Offices/les Unités et les Organisations Centrales et de créer un déploiement informatisé ayant le but de recueillir dans un «database» les nouvelles acquises, par permettre une vite et rationnelle gestion des ressources humaines toutes les fois qu'un problème va se présenter. Mais la réalisation de ce projet nécessite aussi d'un support législatif organisé, qui règle: la constitution et les tâches de la Force de Complètement (FC); les accomplissements d'instruction nécessaires au maintien d'adéquats standards opérationnels; le «status», la sauvegarde sociale et le payment des réservistes volontaires du secteur privé.



Die Streitkräfte für Europa und für das Land. Angebundene Logistikunterstützung, von Claudio Graziano (S.2).

Die Europadivision ist das Hauptziel der Heeresplanung. In diesem Zusammenhang ist die angebundene Logistik von grundlegender Bedeutung, um dem neuen europäischen Sicherheitssystem Glaubwürdigkeit zu verleihen. Auch für die Logistikeinheiten wird man das Prinzip der Modularstruktur und der Flexibilität anwenden müssen. In diesem Sinne werden die neuen Typologien logistischer Regimenter wie geschlossene, aber nicht wie Verwendungseinheiten aufgebaut und, was ihre Fähigkeiten angeht, der Lösung der zugeordneten Aufgaben angepasst sein.

Die Umwälzungen im militärischen Bereich (1.Teil), von Pier Paolo Lunelli (S.16).

Die immer schnellere Ausbreitung neuer Informations- und Kommunikationstechnologien bewirkt epochale Umwälzungen im militärischen Bereich. Wie wird sich dies auf die Militärdoktrin und auf die Einsatzmöglichkeiten der Streitkräfte auswirken?

Der Autor unternimmt den Versuch einer ersten Antwort mit einer historischen Analyse der Entwicklung militärrelevanter Technologie vom 14. Jahrhundert bis heute und behält sich vor, in einer späteren Arbeit in dieser Zeitschrift einige Überlegungen zu den Zukunftsperspektiven der italienischen Streitkräfte darzulegen.

Die Verteilung des Äthers, von Ornella Rota (S. 28).

Die Weltfunkkonferenz in Istanbul im vergangenen Frühjahr hat auf globaler Ebene die Situation der Funkfrequenzen untersucht, mit dem Ziel, einen Plan für die bessere

Ausnutzung dieser Ressourcen im Weltraum und auf der Erde auszuarbeiten.

Dies ist eine breites und komplexes Problemfeld, das auch den militärischen Bereich betrifft, der einer Beobachtung unterworfen wird, um eventuell dessen Frequenzen zum Vorteil ziviler Nutzung zu beschneiden: dieses Vorgehen birgt nicht nur das Risiko, die Einsatzfähigkeit der Streitkräfte zu gefährden, sondern auch die staatlichen Kommunikationsressourcen.

Die Schweiz: Die neuen Streitkräfte Interview mit Generalleutnant Hans-Ulrich Scherrer,

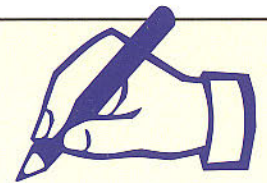
geführt von Enrico Magnani (S. 34).

Die Teilnahme des schweizerischen Heeres an Peacekeepingoperationen im Kosovo und in Mazedonien steht im Einklang mit der neuen Sicherheitsstrategie «Sicherheit durch Zusammenarbeit», die dazu geführt hat, dass die Eidgenossenschaft im Oktober 1996 dem Programm *Partnership for Peace* zugestimmt hat. Diese Erfahrung hat eine wichtige stimulierende Wirkung gehabt, und zwar sowohl in Hinblick auf die Lehrmeinung, als auch, was die Organisation betrifft. Ein Prozess der Umstrukturierung ist im Gange, der sich auf die Kriterien der Multifunktionalität, der Modularstruktur, der Bereitschaft und Interoperabilität im Hinblick auf die internationale Zusammenarbeit bezieht. Doch muss dieser Prozess dennoch das traditionelle Miliz- (Bürger-)heer bewahren, dass sich auch ausserhalb des rein militärischen Rahmens bewährt hat, und ausserdem eine genügende Reservekraft bereitstellen.

Die Slowakische Republik: Die neuen Streitkräfte. Interview mit Generalmajor Dusan Humeny, von Enrico Magnani (S. 42).

Die slowakischen Streitkräfte haben nach der politischen Trennung von der Tschechischen Republik, die zwangsläufig auch die Streitkräfte aufspaltete, den Weg einer radikalen Neugliederung beschritten. Das Vorhaben sieht noch im Jahre 2001 die Verringerung der

SOMMAIRE INHALT RESUMEN



Streitkräfte auf 12200 Soldaten und 1800 Zivilisten vor: Somit wird man ein agiles und schlankes Heer haben, das der Notwendigkeit, sich aktiv den internationalen Verpflichtungen zu stellen, angemessen ist.

Das Vereinte Europa zwischen Realität und Traum, von Luigi Campagna (S. 48).

Die Geschichte der westlichen Völker und Nationen ist gekennzeichnet gewesen durch einen langen, beschwerlichen Weg. Heute sind wir mit vielfachen Unterschieden und Widersprüchen konfrontiert, die das Ziel einer echten politischen, wirtschaftlichen, militärischen und sozialen Einheit immer weiter in die Ferne zu rücken scheinen. Wichtige Meilensteine des Einigungsprozesses sind erreicht worden, von der Geburt der EWG über die Schaffung von Gemeinschafts- und zwischenstaatlichen Organen, bis zur Unterzeichnung der Verträge von Maastricht und Amsterdam - doch viele Schwierigkeiten bleiben zu überwinden.

Das Problem der Reorganisierung der Streitkräfte, von Sauro Baistocchi (S. 56).

Der schwierige Rationalisierungsprozeß des Heeres setzt voraus, die organisatorischen Entwicklungsmöglichkeiten erkennen zu können. Die Veränderungen, so sie aus moderner Perspektive durchgeführt werden, werden den Streitkräften eine höhere Effizienz im operativen und im funktionalen Bereich verleihen. Der springende Punkt der Erneuerung ist das Humankapital, daß vor allem im Bereich der Motivation und der beruflichen Wiederqualifikation zum Zeit- oder Berufssoldaten valorisiert werden sollte.

Die internationalen Beziehungen im neuen Jahrtausend: Der Einfluß der Globalisierung, von Carlo Bellinzona (S. 70).

Die Wirtschaft hat stets eine führende Rolle im Ablauf der Geschichte gespielt. Mit dem neuen Jahrtausend scheint sich am Horizont eine neue Herausforderung abzuzeichnen: die Globalisierung der Wirtschaft.

Der Artikel beschreibt die neue geostrategische Situation und die Zukunftsperspektiven, insbesondere, was die Vereinigten Staaten und Europa betrifft.

Kommando und Kontrolle, von Angelo Pacifici (S. 78).

Der Aufsatz hat seinen Schwerpunkt auf dem Problem der alliierten Terminologie und der damit verbundenen Abkürzungen, insbesondere im Bereich von «Kommando und Kontrolle». Es handelt sich um eine vergleichende und nachprüfende Untersuchung und die mithilfe von Glossaren, Registern, Lexika, italienischen und NATO-Publikationen die Abkürzungen und Siglen klärt, die in der Militärsprache üblich sind.

Nicht-tödliche Waffen, von Giovanni Caravelli (S. 86).

Nicht-tödliche Waffen müssen die Eigenschaften der Reversibilität haben, und sollen, ohne sie zu ersetzen, die traditionellen Waffen ergänzen. Sie können im wesentlichen in «Antipersonenwaffen» und in «Antimaterialwaffen» eingeteilt werden, die die Eigenschaften des Untauglichmachens, der Neutralisierung und des Blockierens haben. Bei ihrem Einsatz ist die Kombination mit psychologischen und «Intelligence»-(geheimdienstlichen) Operationen von besonderer Bedeutung.

Eine Freiwilligenreserve, von Luigi Semprini (S. 94).

Um den Prozeß der Umwandlung der italienischen Streitkräfte in ein Berufsheer zu vollenden ist es nötig, ein Reservoir an Reservekräften zu schaffen, auf das man sich stützen kann, um die bestehenden Einheiten aufzufüllen. Zu diesem Zwecke ist es notwendig, ein enges Kommunikationsnetz zwischen Kommandos, Behörden und Einheiten einerseits sowie den Zentralstellen andererseits zu knüpfen, sowie eine Datenbankstruktur einzurichten, die die erworbenen Informationen sammelt, um ein schnelles und rationales Personalmanagement bei

jeder neuen Bedürfnislage zu ermöglichen. Doch die Verwirklichung dieses Planes bedarf auch einer schlüssigen gesetzgeberischen Unterfütterung, die folgendes regeln sollte: die Schaffung und die Aufgaben der Ergänzungstreitkraft, die notwendigen Veränderungen in der militärischen Ausbildung, um angemessene operative Standards beizubehalten sowie den Status, die Sozialleistungen und die Bezahlung derjenigen freiwilligen Reservisten, die in der Privatwirtschaft tätig sind.

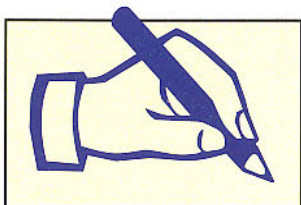


El Ejército para Europa y para el País. El sostén logístico de adhesencia, de Claudio Graziano (p. 2).

La «División por Europa representa el objetivo principal de planificación de las fuerzas. En este cuadro la logística de adhesencia toma importancia fundamental para dar credencia al nuevo sistema de seguridad europea. También para las Unidades logísticas se tendrían que adoptar los principios de la modularidad y de la flexibilidad. En este sentido, las dos tipologías nuevas de Regimientos logísticos se configuraron como Unidades orgánicas, pero no de empleo, dimensionadas en términos de capacidad de desarrollo de las tareas asignadas.

La revolución en las cuestiones militares (1ª parte), de Pier Paolo Lunelli (p. 16).

La expansión siempre más rápida de las nuevas tecnologías de información y comunicación está provocando una revolución muy grande en las cosas militares. ¿Cuáles podrán ser los afectos en la doctrina y en las modalidades de empleo del instrumento? El Autor intenta una primera



SOMMAIRE INHALT RESUMEN

respuesta con una análisis histórica de la evolución tecnológica (desde el siglo XIV hasta hoy), reservándose de proponer en un futuro trabajo en serie unas reflexiones sobre las perspectivas de las Fuerzas Armadas italianas.

La división del éter, de Ornella Rota (p. 28).

La Conferencia mundial sobre las radiocomunicaciones, hecha a Istambul en la primavera pasada, examinó, en el plan general, la situación de las bandas de frecuencia, con el fin de elaborar un plan para una mejor utilización de los servicios en el espacio y en la tierra. Un problema grande y complejo que atañe también el compartimento militar, subpuesto a observaciones para un eventual corte de las gamas de frecuencias en favor de las actividades civiles: eso es algo que arriesga comprometer no solo la operatividad de las Fuerzas Armadas pero también las comunicaciones de Estado.

Suiza. Las nuevas Fuerzas Armadas. Entrevista al Teniente General Hans-Ulrich Scherrer, de Enrico Magnani (p. 34).

La participación del Ejército suizo a las operaciones de «peace keeping» en Kosovo y en Macedonia está junto con la nueva estrategia de «seguridad a traves de la cooperación», que llevó la Confederación, en octubre 1996, a aprobar el programa «Partenariado para la Paz». La experiencia madurada llevó importantes estímulos doctrinales y organizativos. Se está desarrollando un proceso de restructuración, basado en los criterios de multifuncionalidad, modularidad, rapidez y inoperabilidad, en una visión de cooperación internacional. Pero este proceso tendrá, de todos los modos, que salvaguardar el principio tradicional de la «milicia» que se reveló válido también afuera del contexto puramente militar, y garantizar la disponibilidad de una suficiente fuerza de reserva.

República Eslovaca: el nuevo Ejército. Entrevista al Mayor General Dusan Humeny,

de Enrico Magnani (p. 42).

El Ejército eslovaco agazzó la calle para una radical reconfiguración después de la separación política y, en segunda, militar de la República Checa. El proyecto prevee, dentro del 2001, la contracción de las fuerzas en 12 200 militares y en 1 800 civiles: uno instrumento agil, delgado y adecuado a la necesidad de confrontarse activamente con las tareas internacionales.

Europa unida, entre realidad y sueño, de Luigi Campagna (p. 48).

La historia de los pueblos y de las Naciones del Occidente fue caracterizada por un lento y dificil camino. Hoy estamos en frente a muchas diversidades y contradicciones que parecen alejar el objetivo de una verdadera unidad política, económica, militar y social de Europa. Nos llegamos a objetivos importantes en el proceso de unificación del nacimiento de la CEE a la construcción de organos comunitarios y entregovernativos, hasta la estipula de los Tratados de Maastricht y de Amsterdam. Pero hay todavía muchas dificultades de superar.

El problema organizativo del instrumento militar, de Sauro Baistrocchi (p. 56).

El dificil proceso de racionalización del instrumento terrestre implica la necesidad de individuar sus posibilidades de desarrollo organizativo. El cambio, si se actua con visión moderna, podrá garantizar al Ejército una mayor eficacia en terminos operativos y funcionales. Es importante la renovación del capital humano, para valorizar sobretudo en el plan de la motivación y de la recalificación profesional.

“Las relaciones internacionales del nuevo milenio: el impacto de la globalización”, de Carlo Bellinzona (p. 70).

La economía siempre tuvo un papel de remolque en la construcción de la historia. Con el nuevo milenio parece que ya está a lo horizonte un nuevo desafío: la globalización económica. El artículo describe la nueva situación geostrategica y las perspectivas proximas con particular

atención en los Estados Unidos y en la Europa.

Mando y Control, de Angelo Pacifici (p. 78).

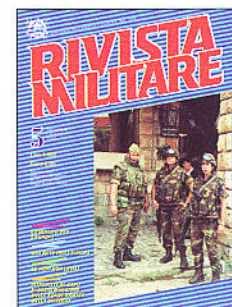
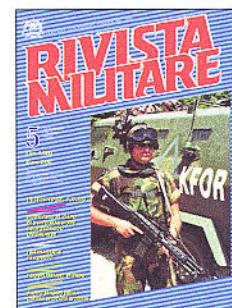
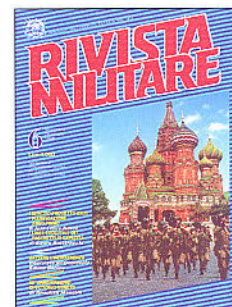
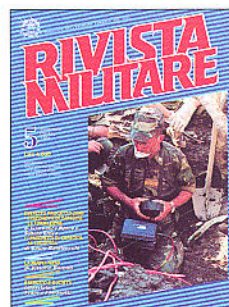
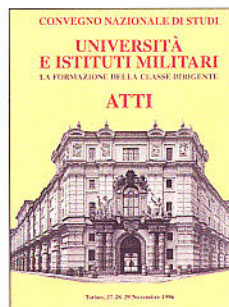
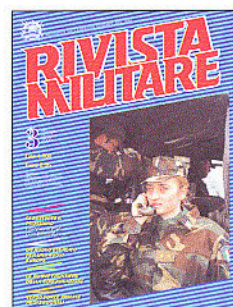
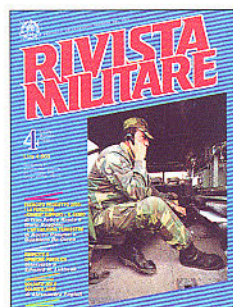
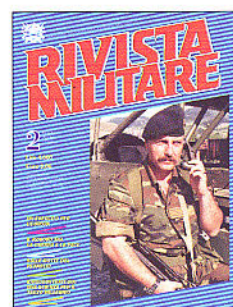
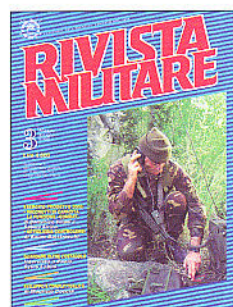
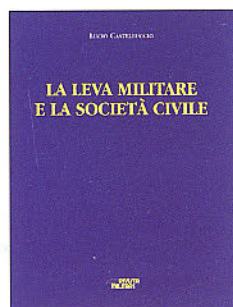
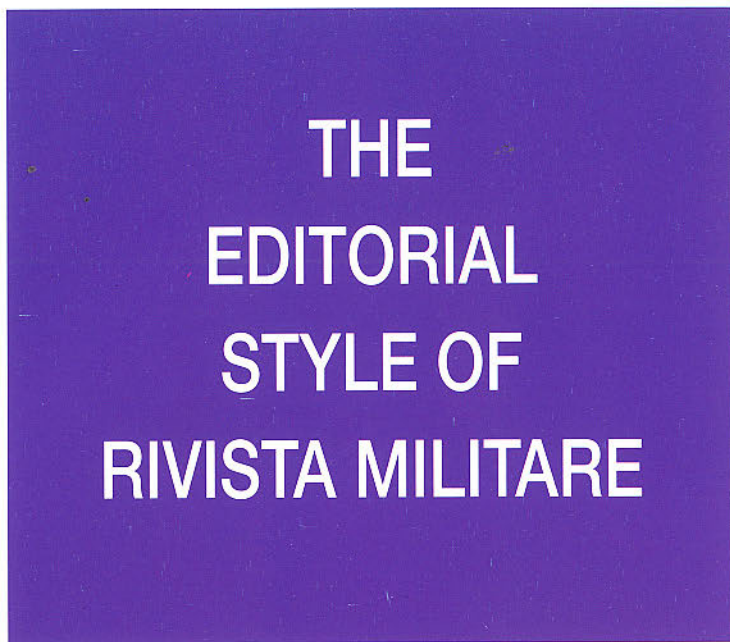
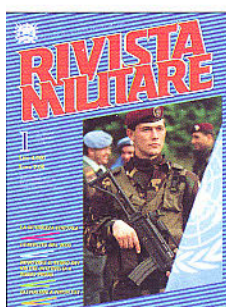
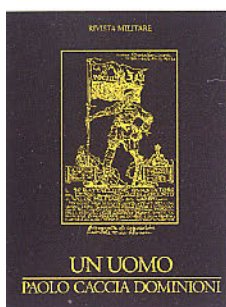
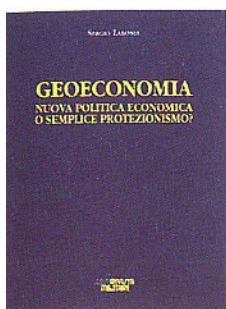
El artículo pone la atención en el problema de la terminología aliada y las relativas siglas conexas, en particular, con el tema del «Mando y Control». Es un estudio de investigación, confronte y verifica conducido por glosarios, nomencladores, diccionarios, publicaciones OTAN y nacionales, que provee elementos de explicación de las abreviaciones y acrónimos en el uso del idioma militar.

Las armas no letales, de Giovanni Caravelli (p. 86).

Las armas no letales tienen que tener caracter de reversibilidad y tienen que poder, aún no quitandole, de ponerse al lado de las tradicionales. Están divididas, por capacidades intrinsecas, en armas «contraperpersonales» y armas «contramateriales», con características de inhabilitación, neutralización y bloqueo. En sus empleo, tiene mucha importancia la interconexión con las operaciones psicológicas y de «intelligence».

Una reserva a base voluntaria, de Luigi Semprini (p. 94).

Para finalizar el proceso de profesionalización del Ejército italiano, es necesario construir un depósito de fuerzas de reserva a lo que sacar para completar las unidades existentes. Todo eso lleva la necesidad de activar una fija red de comunicación entre Mandos/Entes/Unidades/ y Organos Centrales y de poner en ser un aparato informatizado que agarre las noticias adquiridas en un «database», para una rápida y racional gestion de los recursos humanos cada vez salgan nuevas exigencias. Pero la realización del proyecto necesita un apoyo legislativo orgánico también, que regle la constitución y las tareas de las Fuerzas de Fin (FC); los adempimientos adestrativos utiles para el mantenimiento de adecuados «standards» operativos; el estatus, la tutela social y la retribución de los reservistas del sector privado.



RIVISTA MILITARE

JOURNAL OF THE ITALIAN ARMY FOUNDED IN 1856

